ANNUAL REPORT
2011-12






सत्यमेव जयते

Department of Telecommunications
Ministry of Communications & Information Technology
Government of India
New Delhi

ANNUAL REPORT
2011-12

DEPARTMENT OF TELECOMMUNICATIONS
MINISTRY OF COMMUNICATIONS &
INFORMATION TECHNOLOGY
GOVERNMENT OF INDIA
NEW DELHI

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1. Indian Telecom Sector: An Overview

Role of Telecom Sector in Development Process

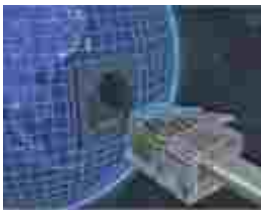
Telecommunication has been recognized the world-over as a powerful tool of development and poverty reduction through empowerment of masses. It is one of the key enabler for 'inclusive and sustainable' growth and in areas of poverty reduction, employment generation, gender equity, balanced regional development and special protection for vulnerable sections of the society. Indian telecommunication sector has emerged as a strong growth engine for the Indian economy in the last decade with the country witnessing tremendous growth in wireless sector. The penetration of internet and broadband has also improved. The Government of India approved a project for creation of National Optical Fibre Network for connecting 2.5 lakh Gram Panchayats with support from Univeral Service Obligation Fund (USOF). The proposed National Telecom Policy, under finalization in consultation with various stakeholders is a step forward for bringing rapid and equitable growth of this sector.

Present Status of the Sector

Indian Telecommunication sector maintained the impressive growth rate during the current year. Indian telecom network has 926.55 million connections at the end of December'11 with 893.86 million wireless connections and is the second largest network in the world after China. The one billion mark also appears to be achievable. The penetration of internet and broadband has also improved with 20.99 million internet subscribers and 13.30 million broadband subscribers across the country. The future progress of telecommunication in our country is very encouraging as operators have started rolling out the wireless broadband networks in the country and soon the services are expected to be available in the entire country. The present status of telecom sector is given in **Box-1**:

Box-1: Present Status of the Telecommunication Sector (As on 31.12.2011)

- Indian Telecom market is one of the fastest growing markets in the world.
- With its 926.55 million Telephone connection, it is the second largest network in the world after China.
- It is also the second largest wireless network in the world.
- The country is poised to achieve 1 billion telephone connections.
- Wireless telephones are increasing at a faster rate. The share of wireless telephones is 96.47% of the total phones.
- The share of private sector in total telephones is 86.09%.
- Overall tele-density has reached 76.86%. Urban tele-density is 167.46%, whereas rural tele-density is at 37.52% which is also steadily increasing.
- Broadband connections increased to 13.30 million.



Growth of Telecom Sector

The opening of the sector has not only led to rapid growth but also benefited the consumers through low tariffs as a result of intense competition. Telecom sector has witnessed a continuous rising trend in the total number of telephone subscribers. From a mere 22.81 million telephone subscribers in 1999, the number increased to 846.33 million at the end of March, 2011. The total number of telephones stands at 926.55 million at the end of December'11 showing addition of 80.22 million during the period from April to December'11. Wireless telephone connections have contributed to this growth as their number rose from 165.09 million in 2007 to 811.60 million in March, 2011 and 893.86 million at the end of December'11. The wire line connections have however, declined from 40.77 million in 2007 to 34.73 million in March, 2011 and 32.69 million in December'11. (Table 1)

Table : Growth of Telephones over the years

(In million)

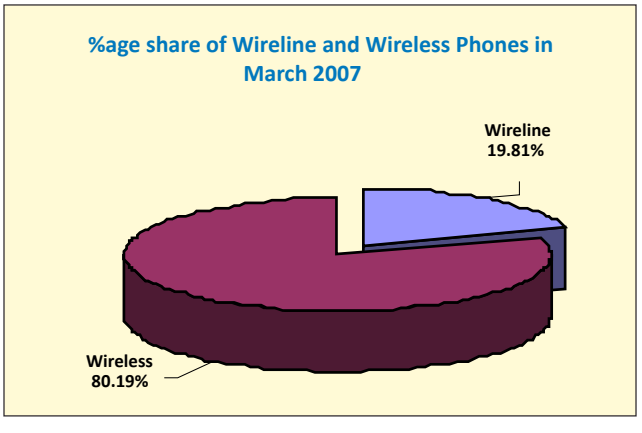
	March'07	March'08	March'09	March'10	March'11	December'11
Wireline	40.77	39.41	37.97	36.96	34.73	32.69
Wireless	165.09	261.08	391.76	584.32	811.60	893.86
Gross Total	205.87	300.49	429.73	621.28	846.33	926.55
Annual Growth%	44.88%	45.96%	43.01%	44.58%	36.22%	9.48%

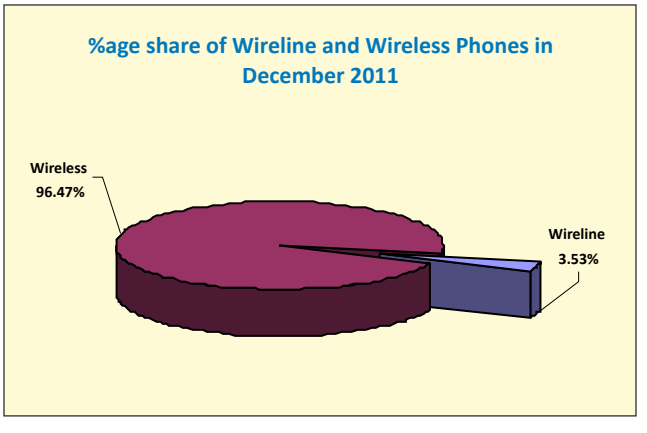
Changes in Structure of Telecom Sector

Wire line vs. Wireless

The growth of wireless services has been substantial, with wireless subscribers growing at a compounded annual growth rate (CAGR) of 42.7% since 2007. Wireless has overtaken wire lines. The share of wireless phones has increased from 80.19% in 2007 to 96.47% in December'11.

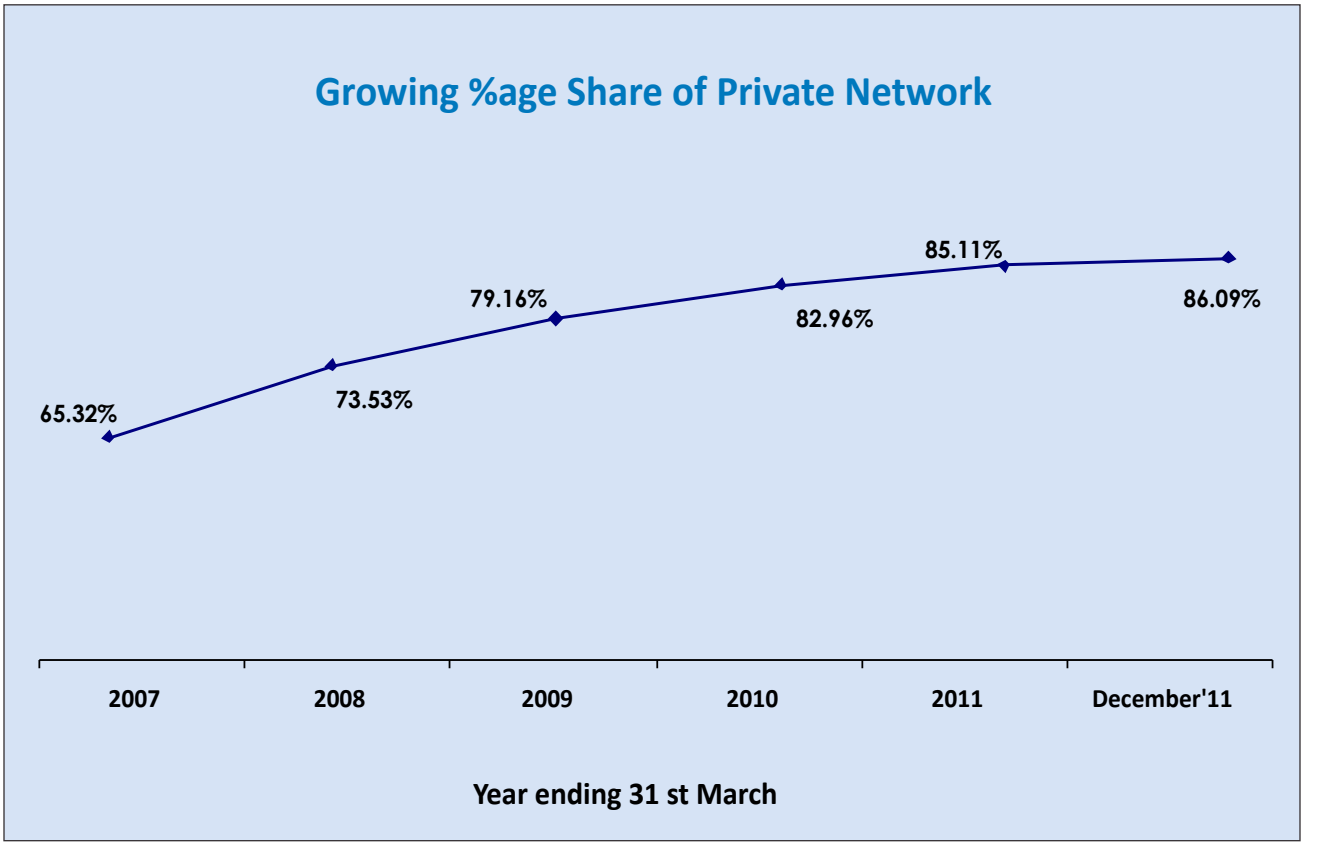
On the other hand, the share of wire line has steadily declined from 19.81% in 2007 to 3.53% in December'11. Wireless phones have increased as they are preferred because of their convenience and affordability. As a result, telephones today have come within the reach of the common man.





Private vs. Public

The fruits of the liberalization efforts of the Government are evident in the growing share of the private sector. The private sector is now playing an important role in the expansion of telecom services. The share of private sector in total telephone connections is 86.09% as per the latest statistics available for December'11 as against a mere 5.35% at the end of March 1999.



Trend in Tele-density

Tele-density is an important indicator of telecom penetration in the country. There has been phenomenal growth of tele-density in the country with the evolution of new wireless technologies.

- The tele-density which was 18.22% in March 2007 increased to 70.89% March, 2011and 76.86% in December'11. Thus there has been continuous improvement in the overall tele-density of the country.
- The rural tele-density which was 5.89% in March 2007 increased to 33.83% in March, 2011and 37.52% at the end of December'11.
- The urban tele-density increased from 48.10% in March 2007 to 156.94% in March, 2011 and stands at 167.46% at the end of December'11.

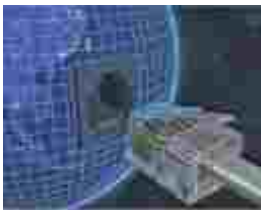
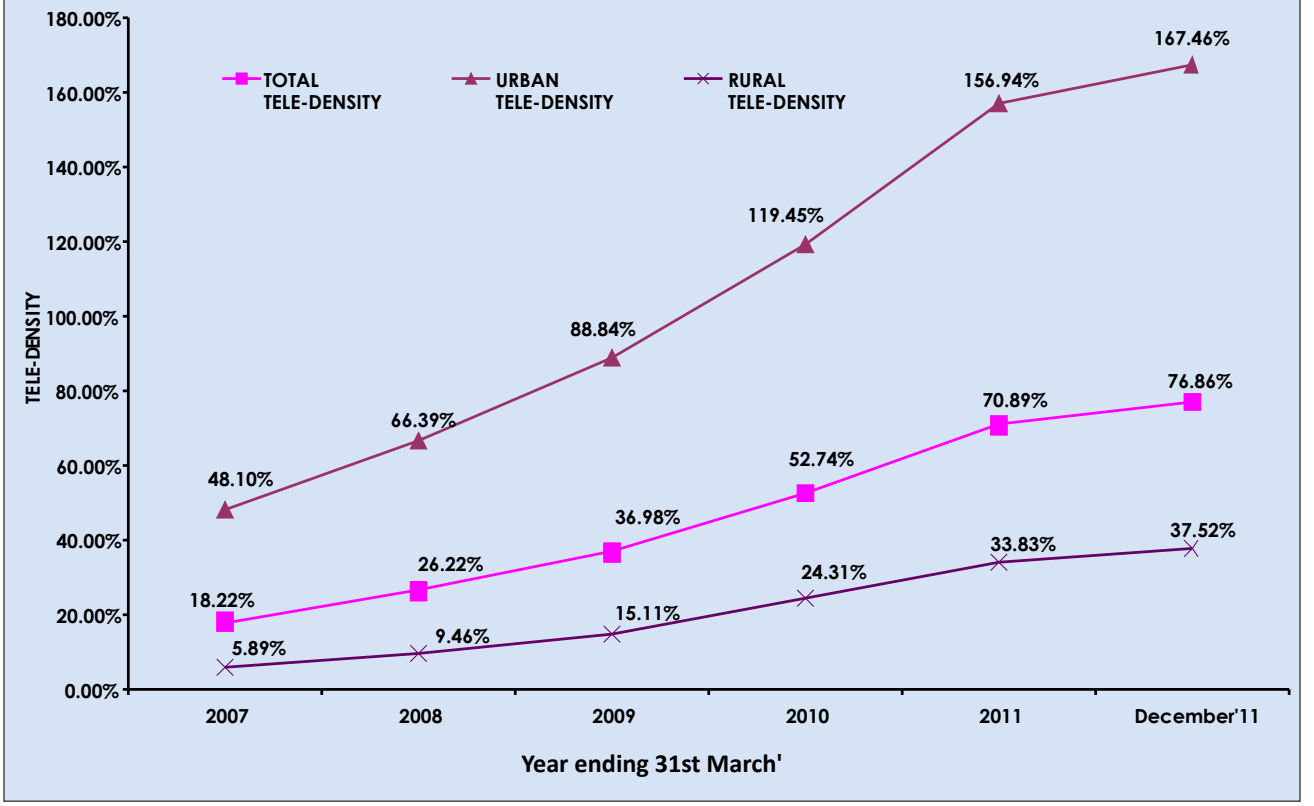


FIGURE - 2
TELE-DENSITY (Number of Telephones per 100 Population)



For economic and social development of rural areas, rapid increase in rural tele-density is of utmost importance. With the introduction of wireless phones in rural areas, there is increasing trend in rural tele-density also. The Government is taking various measures under USOF for expansion of mobile network in remote and rural areas. As the urban areas have got largely saturated, private service providers are also looking for further opportunities in rural areas. All these factors have led to increasing trend in rural tele-density.

Shifting Focus on Rural Telephones

The rural telephone connections increased from 47.10 million in March 2007 to 282.29 million in March, 2011 and further to 315.39 million in December'11. The share of rural phones in the total telephones has constantly increased, from 22.88% in 2007 to 34.04% in December'11. The wireless connections have contributed substantially to total rural telephone connections. Their share in the rural telephones increased from 73.33% in March, 2007 to 96.90% in March, 2011 and further to 97.53% in December'11. During 2011-12 (upto December), the growth rate of rural telephone was 11.73% as against the growth of 8.35% of urban telephones. The private sector has also contributed to the growth of rural telephones as it's share was 86.78% in December'11 up from 51.87% in 2007. The measures undertaken by USOF to increase rural connectivity are given in **Box-2**.

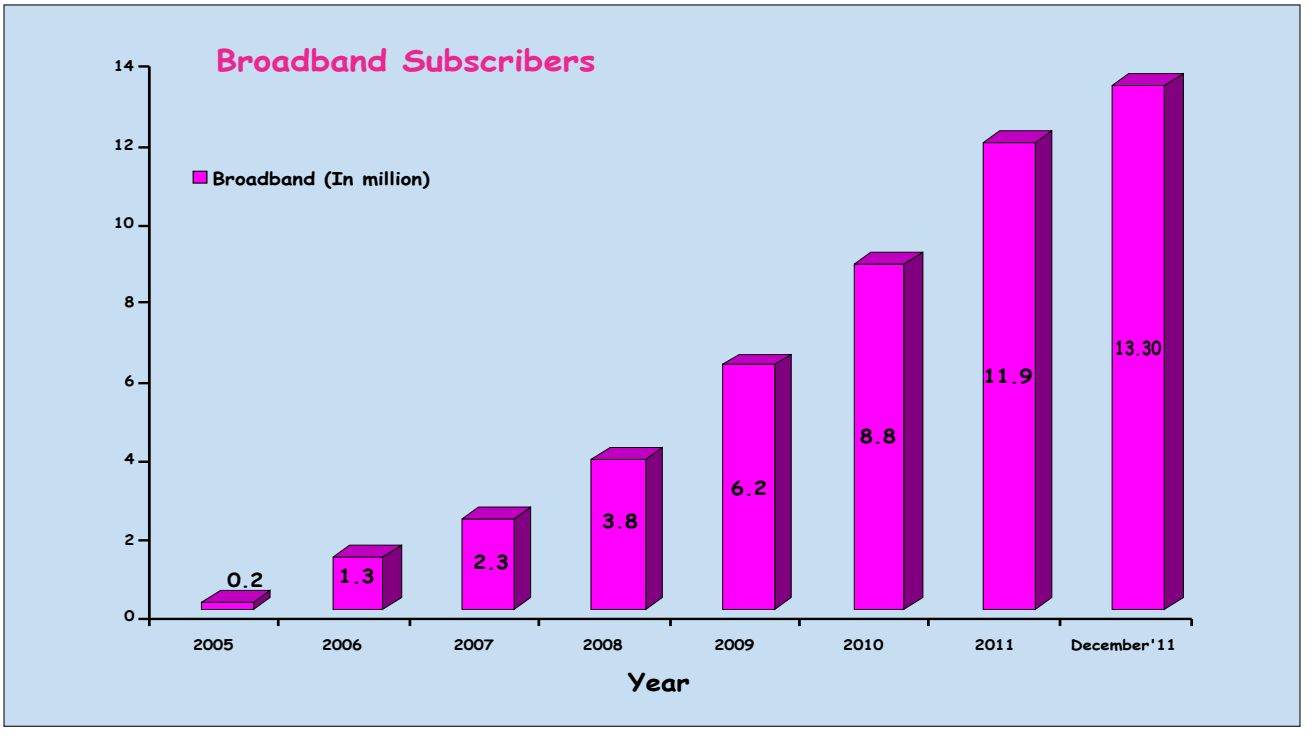
Box-2: Steps taken under USOF for increasing Rural Connectivity

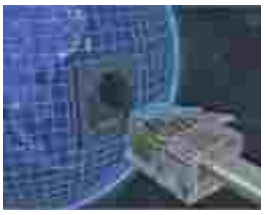
- By December'11, 5.76 lakh (97.11%) villages were covered by Village Public Telephone (VPT) facility in the country.
- A total number of 1, 84,775 Multi Access Radio Relay (MARR) based VPTs installed before 01.04.2002 have been replaced by VPTs with advanced reliable technologies as on 31.12.2011.
- Setting up of 7353 towers spread over 500 districts of 27 states of the country under Infrastructure Sharing Scheme. 7296 towers i.e. about 99.22% have been set up as on December 31, 2011

Broadband

Broadband connectivity is increasingly being seen as an integral driver of improved socio-economic performance. The Indian Government strongly believes that all citizens of the country should have access to broadband and the transformative opportunities. Broadband services empower masses. They allow individuals to access new career and educational opportunities, they help businesses reach new markets and improve efficiency and they enhance the Government's capacity to deliver critical services like health, banking and commerce to all of its citizens.

Provision of Broadband in rural and remote areas will also help in bridging the **"digital divide"** and the widespread adoption of broadband in rural areas will have a multiplier effect over the long-term. It will help improve productivity in rural areas, help overcome the constraints of an inadequate transport





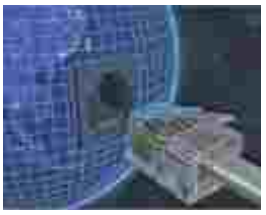
infrastructure and overall improve the quality of life in rural areas. Given the significant economic and social benefits, expanding affordable access to broadband has become a high priority for the Government. The development of a robust broadband ecosystem will be the key to meet Government's objectives. It is a known fact that wireless is the quickest and most efficient medium to provide broadband services in the access network. To ensure broadband coverage, the Government has approved a project for creation of a National Optical Fibre Network (NOFN) for providing broadband connectivity to 2.5 lakh Village Panchayats. The 3G and BWA auctions that took place last year are expected to act as catalysts for enabling internet access to even the remotest parts of India. Indian Telecom market is on the cusp of an "I**nformation Revolution"**. Several policies have been announced and implemented to promote broadband in the country (**Box-3**). As a result of these measures, the no. of broadband subscribers grew from 0.18 million in 2005 to 11.87 million in March 2011 and 13.30 million, at the end of the December'11.

Box-3: USOF for Boosting Rural Broadband

- 2.5 lakh Village Panchayats spread across country will be connected by National Optical Fibre Network (NOFN) with estimated expenditure of approx. Rs. 20,000 crore. NOFN proposed to be completed within a period of 2years.
- Scheme to provide 888832 wire line broadband connections to individuals and Government institutions and set up 28672 kisoks, by 2014. Institutional users such as Gram Panchayats, Higher Secondary Schools and Public Health Centres will be provided Broadband. As on 31st December 2011, 338617 broadband connections and 6729 kiosks provided in rural and remote areas.
- Subsidy proposed for the wireless broadband active infrastructure such as BTS which would provide broadband coverage to about 5 lakh villages at a speed of 512 kbps.
- Scheme launched to strengthen OFC network in rural areas to provide sufficient back-haul capacity to integrate voice and data traffic.

Hon'ble Prime Minister of India Dr. Manmohan Singh addressing at "India Telecom 2011" at New Delhi.

Hon'ble Prime Minister of India Dr. Manmoan Singh receiving Memento from Hon'ble Minister of Communications & IT at India Telecom 2011



Shri Kapil Sibal, Hon'ble Minister of Communications & IT alongwith Shri Sachin Pilot, Hon'ble Minister of State for Communcations & IT at the foundation stone laying ceremony of National Institute of Communication Finance at Ghitorni New Delhi.

Shri Kapil Sibal, Hon'ble Minister of Communications & IT and Shri Sachin Pilot , Hon'ble Minister of State for Communications & IT with senior officers of DoT at Roundtable Conference with Consumer User Groups of Telecom on 5th July 2011, at New Delhi.

New Frontiers of Growth

3G and BWA services

The commendable growth of the mobile sector in India is yet to be followed in broadband sector. While the last few years were witness to mobile revolution, the next few years look even more exciting in the field of broadband and mobile value added service (MVAS). After two decades of strong growth in voice services, data services will be the next trigger for growth in the Indian telecom market- for both the wire line and wireless segment. Data usage is expected to grow at a faster pace with 3G and BWA deployments. Increasing use of smart mobile devices like I-Phones are also expected to catalyze the data usage growth.

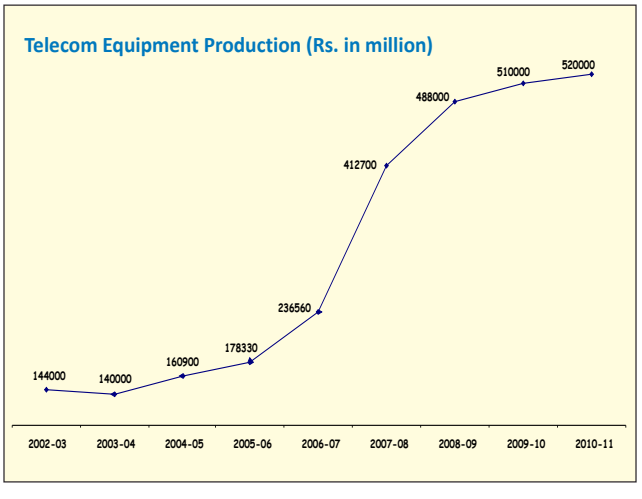
Value Added Services (VAS)

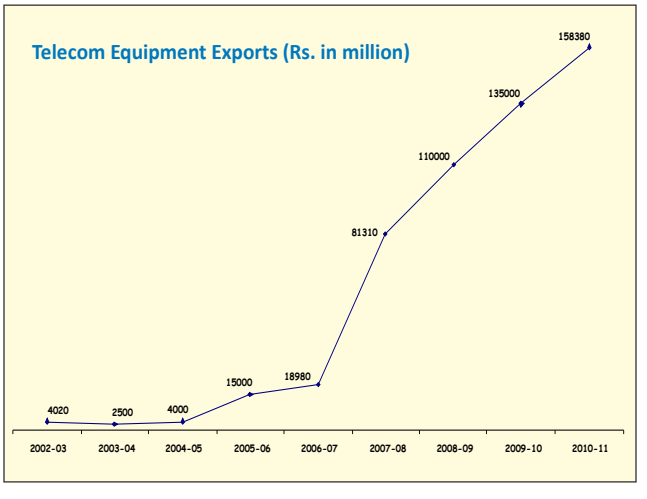
The mobile value added services such as m-banking, m-education, m-governance, m-health, m-agriculture, etc. has assumed significance in recent times due to the rapid growth in wireless subscriber base. Consequently, the mobile phones have transformed into a persuasive medium to deliver information services spanning various usage areas such as governance, commerce, agriculture, education and health. Thus, m-POWERING is playing an instrumental role in bringing about empowerment to all strata of society by their delivery of services.

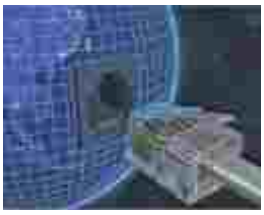
Manufacturing

The exponential growth witnessed by the telecom sector in the past decade has led to the development of the telecom equipment manufacturing and other supporting industries. With the advent of next-generation technologies and operators looking to roll out 3G and broadband wireless access services, the demand for telecom equipment has increased rapidly. In an attempt to capitalize on this opportunity, the government is focusing on developing the domestic manufacturing industry. The Indian equipment manufacturing sector has come a long way in the past few years. From being an import-centric industry, it is slowly but steadily moving towards becoming a global telecom equipment manufacturing hub. In 2002-03, India produced telecom equipment worth Rs. 144000 million, which increased to Rs. 520000 million in 2010-11, registering a growth of 265 per cent.

The country is not only emerging as a manufacturing hub but is also planning to increase its telecom exports. In the year 2006-07, India exported equipment worth Rs. 18980 million, which increased by over 730 per cent to Rs. 158380 million in 2010-11.







Foreign Direct Investment

Today, telecom is the third major sector attracting FDI inflows after services and computer software sector. At present 74% to 100% FDI is permitted for various telecom services. This has helped the telecom sector to grow. Actual Inflow of FDI in Telecom Sector from April 2000 to September 2011 is US $12456 in million.

Regulatory Framework

The Telecom Regulatory Authority of India (TRAI) has always endeavored to encourage greater competition in the telecom sector together with better quality and affordable prices in order to meet the objectives of New Telecom Policy, 1999. A number of recommendations were made by TRAI during 2011-12 which, inter-alia, included recommendation on Telecom Equipment Manufacturing Policy, Green Telecommunications, Telecommunication Infrastructure Policy. TRAI also made 7th and 8th amendment in the Telecom Commercial Communications Customer Preference Regulations in which individual SMSs limit was fixed at 100 SMS per SIM per day increased subsequently to 200 SMSs as a deterrent measure to stop unsolicited SMS to telecom consumers.

In order to protect the interest of the consumers, TRAI has taken steps regarding audit of metering and billing system for bringing uniformity and transparency, prescribing standards relating to accuracy of measurement and reliability of billing etc. The service providers have to furnish the Audit report to TRAI every year, with corrective action taken on inadequacies by the service providers. Besides, TRAI has undertaken activities towards consumer education.

TRAI has also taken steps to ensure the quality of service provided by the service providers by way of monitoring the performance of Basic and Cellular Mobile Telephone Service on quarterly basis and also point of interconnection(POI) congestion through monthly reports.

The above measures are expected to facilitate orderly growth of telecom sector by promoting healthy competition and enhancing investment efficiency, besides protecting interests of consumers.

Research & Development

C-DoT, an autonomous society under DoT, is carrying out research & development in areas of national importance in Telecommunication –Satellite communications, IN, ATM, DWDM, NMS, Wireless Broadband, GPON, NGN and Mobile Cellular systems. C-DoT's ATM technology has been mandated for use for onboard communication in Indian Naval fleet. GPON is expected to play a lead role in bringing broadband pipes to rural India. The SG-RAN product, based on sharing of active GSM infrastructure, will bring affordable mobile telephony to the rural market. The MAX-NG will breathe fresh life into the fixed line infrastructure of the country by bringing new service features to POTS (Plain Old Telephony Service) together with VoIP and broadband access to C-DoT's MAX / RAX subscribers.

C-DoT has also been active in the area of providing telecom software solutions. C-DoT's umbrella NMS (Network Management System) solutions have made it possible to manage networks with elements from multiple vendors. The Data Clearing House (CLH) solution of C-DoT is commercially deployed for reconciling the roaming records between BSNL and MTNL and is holding its own against competitive pressures of the market.

C-DoT has also been entrusted with the projects of national importance, like Central Monitoring System for telecom security and Secure Network for strategic applications.

Public Sector Undertakings

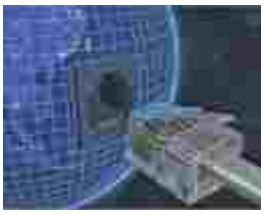
DoT has four PSUs under its administrative control. These are:-

i) Mahanagar Telephone Nigam Limited (MTNL)
ii) Bharat Sanchar Nigam Limtied (BSNL)
iii) ITI Limited
iv) Telecommunications Consultants India Limited (TCIL)

MTNL and BSNL are the two PSUs under the department that have been instrumental in meeting the growing requirements of telephones and other related services in the country. MTNL, set up in 1986, is a Navratna PSU and provides telecommunication facilities in India's key metros - Delhi and Mumbai. MTNL achieved a customer base of 9 million at the end of December'11. MTNL has allowed all its GSM mobile subscriber access to 3G services in order to make the 3G services popular among its subscribers. The company had 10 lakh broadband customers at the end of December'11. . MTNL is providing Triple play services i.e voice, high speed internet and IPTV on its broadband network. The Government of India currently holds 56.25% stake in the company. The Company has been facing serious competition amidst mounting staff costs and has been incurring losses. The losses which were Rs. 2611 crore in the year 2009-10 increased to Rs.2802 crore in the year 2010-11.

BSNL formed in October, 2000, is providing comprehensive range of telecom services in India: Wireline, CDMA wireless, GSM wireless, Internet, Broadband, Carrier service, MPLS-VPN, VSAT, VOIP services, IN Services etc. The Company had 120 million subscribers including 97 million wireless customers (including CDMA and GSM) in December 2011. Rural telephony is one of the focus areas of BSNL. It has provided Village Public Telephones (VPTs) in 6 lakh villages and has 416 lakh telephones in the rural areas at the end of December'11. BSNL also pays special emphasis on development of telecommunication facilities in North Eastern Region and in Tribal areas. BSNL had introduced broadband services from January 2005 and has provided 86 lakh broadband connections till December 2011. The Company incurred a loss of Rs. 6384 crore in the year 2010-11 up from Rs. 1823 crore in the previous year.

ITI limited is India's pioneering venture in the field of telecommunications since 1948. ITI limited is having state-of-the-art manufacturing facilities spread across six locations and a countrywide network of marketing/service outlets. The company offers a complete range of telecom products and total solutions covering the whole spectrum of Switching, Transmission, Access and Subscriber Premises



equipment. ITI limited has also been giving solutions specially for secured network to Indian Army. The Company incurred a loss of Rs. 459 crore in the year 2009-10 which declined to Rs. 358 crore during the year 2010-11.

Telecommunications Consultants India Limited (TCIL) was set up with a government equity of Rs. 10 lakh in 1978 with the main objective to provide world class technology in all fields of telecommunications and information technology to excel in its operations in overseas and in domestic markets by developing proper marketing strategies, to acquire state-of-the-art technology on a continuing basis and maintain leadership. TCIL is a 100% Government of India owned Schedule-A Miniratna PSU. The Company earned profit of Rs. 163.50 crore during the year 2010-11 compared to the profit of Rs. 197.40 crore during the year 2009-10.

Major Policy Initiatives

Two major policy initiatives relating to National Optical Fibre Network (NOFN) and proposal to bring out National Telecom Policy were taken by Government during current year.

Broadband Connectivity upto Gram Panchayat by National Optical Fiber Network (NOFN):

Government approved a project for National Optical Fiber Network in November, 2011 for providing Broadband connectivity to all 2.5 lakh Gram Panchayats at a cost of approx. Rs. 20,000 crore. The plan is to extend the existing optical fiber network up to Panchayats. The Network will be available to telecom service providers for providing various services to the citizens in a non-discriminatory manner. The Network will provide a highway for transmission of voice, data and video in rural areas. It will enable the broadband connectivity upto 2 Mbps, capable of providing various services like e-education, e-health, e-entertainment, e-commerce e- governance etc. to people and businesses. The people in rural areas, students, entrepreneurs, various Government Departments providing services under e-governance projects will be benefited. It will also provide connectivity to various public institutions like Gram Panchayats, Primary Health Centres (PHCs), schools etc. in rural areas. It will also result in investment from the private sector both for providing different services and for manufacturing of broadband related telecom equipment. The project will be funded by Universal Service Obligation Fund (USOF). The project will be executed by a Special Purpose Vehicle (SPV) which will be a company incorporated under Indian Companies Act 1956 and initially will be fully owned by Central Government, with equity participation from Government and interested Central Public Sector Units (CPSUs) (BSNL, Railtel, Powergrid, GAILTEL, etc.)

Draft National Telecom Policy (NTP) was released on 10th October 2011 for consultations with various stakeholders. The vision of NTP 2011 is to empower the people of India by providing secure, reliable, affordable and high quality converged telecommunication services anytime, anywhere and has inter alia the following objectives:

- To provide affordable voice telephony and high speed broadband services to every citizen in India with special focus on rural and remote areas.

- To improve the broadband experience by enhancing the speed of delivery.
- To make India a global hub of manufacturing for all electronic products including telecom equipment with substantial value addition with in the country and safeguard security concerns of the nation.
- Simplification and rationalisation of licensing regime, transparent system for allocation of spectrum and enable efficient usage of spectrum.
- Discovery of price of spectrum through market related processes.
- To achieve One Nation- Full Mobile Number Portability.
- To enable free roaming throughout the country.
- To harness full potential of mobile phones for enabling provision of citizen centric services related to education, health, employment, agriculture, entertainment, banking & insurance services, skill upgradation, vocational training etc.
- To encourage indigenous manufacture of cost effective mobile devices.
- The faster roll out of high speed and reliable broadband in rural and urban areas will enable decentralised governance, participative democracy and delivery of basic services such as health and education to every citizen of the country. The thrust on manufacturing will promote entrepreneurship, create more job opportunities, reduce imports and improve security. Efficient usage of scarce resources like spectrum will result in better quality of service to the customers at affordable cost.
- The new policy regime will be beneficial to end consumers/citizens, Telecom Service Providers, Value Added Service Providers, Government and Manufacturers.

Views/comments from various stakeholders have been received in the Department. The same are under consideration for finalizing the National Telecom Policy.

Vision

The telecom landscape in the country has undergone a dramatic transformation from the government monopoly to a competitive environment with multiple telecom service providers. Opening up of telecom sector and introduction of wireless services have created an impressive forward momentum in India, resulting in massive investment in the sector. However, aggressive growth observed by wireless services is yet to be replicated in case of broadband service. The roll out of the BWA and 3G services will enhance the wireless broadband penetration across the country and help connect the remotest locations across India. The potential development impact of wireless broadband access will be seen in coming years as internet users are shifting more and more from wire line to wireless connections and devices and secondly, wireless-broadband access including prepaid mobile broadband is mushrooming now a days. Mobile value added services or m-powering will digitally transform the nation and help foster inclusive growth. The government has a vision to provide telephone connection and broadband facilities on demand across the country at an affordable price.

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II. Telecom Commission

The Telecom Commission was set up by the Government of India vide Resolution dated April 11, 1989 with administrative and financial powers of the Government of India to deal with various aspects of Telecommunications. The Commission consists of Secretary (Telecom) as Chairman and four full time members, who are ex-officio Secretaries to the Government of India in the Department of Telecommunications and four part time members who are the Secretaries to the Government of India of the Departments concerned. The present composition of the Commission is as follows: -

Chairman	Shri R. Chandrashekhar	w.e.f. September 24, 2010
Member (Finance)	Ms. Sadhana Dikshit, Advisor (Finance) is looking after the work of Member (Finance)	w.e.f. April 1, 2011
Member (Services)	Shri S. C. Misra	w.e.f. March 17, 2010
Member (Technology)	Shri Chandra Prakash	w.e.f. September 17, 2009

The part time members are Secretary Department of Information Technology, Secretary Department of Economic Affairs, Secretary Planning Commission and Secretary Department of Industrial Policy and Promotion.

The major functions of the Telecom Commission include policy formulation, review of performance, licensing, wireless spectrum management, administrative monitoring of PSUs, research and development, standardization/validation of equipment and International Relations.

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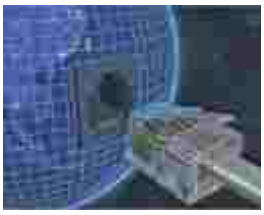
III. Department of Telecommunications

ROLE AND FUNCTIONS

The Department of Telecommunications (DoT) is responsible for policy formulation, performance review, monitoring, international cooperation, Research & Development and grant of licences to operators for providing basic and value added services in various cities and telecom circles as per approved policy of the Government. The Department also allocates frequency and manages radio communications in close coordination with the International bodies. It is also responsible for enforcing wireless regulatory measures and monitoring the wireless transmission of all users in the country. The office of Administrator, USO as an attached office of DoT was set up w.e.f. June 1, 2002 for the purpose of implementation of Universal Service Support Policy. After formation of BSNL in October 2000, following are the functions assigned to the DoT under Government of India (Allocation of Business), Rules, 1961:-

- Policy formulation, licensing and coordination matters relating to telegraphs, telephones, wireless, data, facsimile and Telematics services and other similar forms of communications.
- International cooperation in matters connected with telecommunications, including matters relating to all concerned international bodies such as International Telecommunication Union (ITU), its Radio Regulation Board (RRB), Radio Communication Sector (ITU-R), Telecommunication Standardization Sector (ITU-T), Development Sector (ITU-D), International Telecommunication Satellite Organization (INTELSAT), International Mobile Satellite Organization (INMARSAT), Asia Pacific Telecommunication (APT).
- Promotion of standardization, research and development in telecommunications.
- Promotion of private investment in Telecommunications.
- Financial assistance for the furtherance of research and study in telecommunications technology and for building up adequately trained manpower for telecom programme, including:-
  a) assistance to institutions/scientific institutions and to universities for advanced scientific study and research; and
  b) grant of scholarships to students in educational institutions and other forms of financial aid to individuals including those going abroad for studies in the field of telecommunications.
- Procurement of stores and equipment required by the Department of Telecommunications.
- Telecom Commission.
- Telecom Regulatory Authority of India.
- Telecom Disputes Settlement and Appellate Tribunal.
- Administration of laws with respect to any of the matters specified in this list, namely:
  a) The Indian Telegraph Act, 1885 (13 of 1885);
  b) The Indian Wireless Telegraphy Act, 1933 (17 of 1933); and
  c) The Telecom Regulatory Authority of India Act, 1997 (24 of 1997).



- ITI Limited.
- Post disinvestment matters relating to M/s Hindustan Teleprinters Limited.
- Bharat Sanchar Nigam Limited.
- Mahanagar Telephone Nigam Limited.
- Telecommunications Consultants (India) Limited.
- All matters relating to Centre for Development of Telematics (C-DoT).
- Residual work relating to the erstwhile Department of Telecom Services and Department of Telecom Operations, including matters relating to the following:-
  a) Cadre controlling functions of Group 'A' and other categories of personnel till their absorption in Bharat Sanchar Nigam Limited.
  b) Administration and payment of terminal benefits.
- Execution of works, purchase and acquisition of land debitable to the Capital Budget pertaining to telecommunications.

GRANT OF LICENSES

UNIFIED ACCESS SERVICES

There were 240 Unified Access Service (UAS), 2 Basic Service and 37 Cellular Mobile service (CMTS) Licenses as on December 31, 2011.

Permission for usage of dual technology spectrum (both CDMA and GSM) under the same CMTS/UAS License has been granted to 8 companies as on December 31, 2011.

CARRIER SERVICES

National Long Distance Service

National Long Distance (NLD) Service was opened to the private sector w.e.f. 13 August, 2000. Indian registered companies having a net worth of Rs 2.5 crore and paid up equity of Rs. 2.5 crore are eligible to apply. The total foreign equity in the applicant company must not exceed 74 percent at any time during the entire license period. Investment in the equity of the applicant company by an NRI/OCB/International funding agency is counted towards its foreign equity. The entry fee of Rs. 2.5 crore is to be submitted before signing the license agreement. There is no restriction on number of operators. An NLD operator can carry inter-circle traffic in the country. The license for NLD operator is issued on non-exclusive basis, for a period of 20 years and is extendable by 10 years at one time. In addition to Bharat Sanchar Nigam Ltd. (BSNL), 32 more companies have signed license agreement for National Long Distance Service as on 31.12.2011. The competition has resulted in lowering of tariff.

International Long Distance Service

The International Long Distance (ILD) Service is basically a network carriage service, providing International connectivity to the network operated by foreign carriers. In accordance with the New Telecom Policy-1999, the Government opened the International Long Distance Service from 1st April 2002 to the private operators. There is no restriction on the number of operators. The Indian registered companies having a net worth of Rs. 2.5 crore are eligible to apply. The total foreign equity in the applicant company must not exceed 74 percent at any time during the entire license period. Investment in the equity of the applicant company by an NRI/OCB/International funding agency is counted towards its foreign equity. The entry fee of Rs. 2.5 crore is to be submitted before signing the license agreement along with Performance Bank Guarantee of Rs. 2.5 crore. The license is valid for a period of 20 years from the date of license agreement. So far 26 companies have signed license agreement for International Long Distance Service.

Infrastructure Provider Category – I (IP-I)

The applicant company for IP-I requires only registration with DoT. Companies registered as IP-I can provide assets such as dark fibre, right of way, duct space and tower. All Indian Registered companies are eligible to apply. There is no restriction on foreign equity and number of entrants. There is no entry fee and bank guarantee required. The applicant company is required to pay only an amount of Rs. 5,000 as processing fee along with the application. So far 392 companies have been registered as Infrastructure provider Category – I.

Voice Mail /Audiotex/Unified Messaging Service

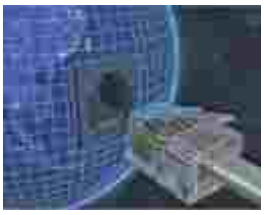
New Policy for Voice Mail/Audiotex Service in terms of NTP-99 was announced in July 2001 by incorporating a new service, namely, Unified Messaging Service (UMS). UMS is a system by which voice mail, fax and e-mails (all the three) can be received by one mailbox using telephone instrument, fax machine, mobile phone, Internet browser etc. Presently there are 26 licenses in 08 cities owned by 17 companies for providing Voice Mail/Audiotex/Unified Messaging Service. There is no license fee for providing Voice Mail/Audiotex Service.

Policy for Public Mobile Radio Trunk Service licence

Policy for Public Mobile Radio Trunk Service (PMRTS) in terms of NTP-99 was announced on November 1, 2001. The new PMRTS licenses are granted on non-exclusive basis. Presently, there are 28 licenses owned by 9 companies to provide PMRT service in 4 metros and 9 circles.

Policy for Global Mobile personal Communication by Satellite Service (GMPCS) license

Policy for grant of license for Global Mobile Personal Communication by Satellite Service (GMPCS) in terms of NTP-99 was announced on November 2, 2001. The process of grant of GMPCS license is a very involved process. The application of GMPCS license containing the entire proposal is submitted to Law



Enforcing Agency for Security Clearance. The LOI is issued after the proposal is cleared from security angle by Inter-Ministerial Committee comprising of Cabinet Secretary, Defence Secretary, Home Secretary, Secretary Department of Space, and Secretary Intelligence Bureau. The process also involves testing of the GMPCS Gateway Earth Station with respect to Security Monitoring. The license fee, which is in the form of revenue sharing, is 10 percent of the adjusted gross revenue and entry fee is Rs.1 crore. As on date, no GMPCS license has been granted.

Very Small Aperture Terminal (VSAT) Service

There were 14 Commercial CUG VSAT licensees with about One lakh thirty thousand VSATs and 37 Captive CUG VSAT Licensees with about 6,000 VSATs as on December 31, 2011.

INTERNET AND BROADBAND SERVICES

As on December 31, 2011 there were 388 Licensees for Internet Services which include 103 Category A Licensees, 155 Category B Licensees and 130 Category C Licensees. Two Internet Service Licensees have been permitted to provide IPTV Services. Further, there were 20.33 million internet subscribers as on June 30, 2011 and about 13.30 million broadband subscribers as on as on December 31, 2011.

INVESTMENT POLICY (IP)

Telecom Sector is considered to be one of the most attractive sectors for foreign direct investment. Present FDI policy for the Telecom sector is as under:

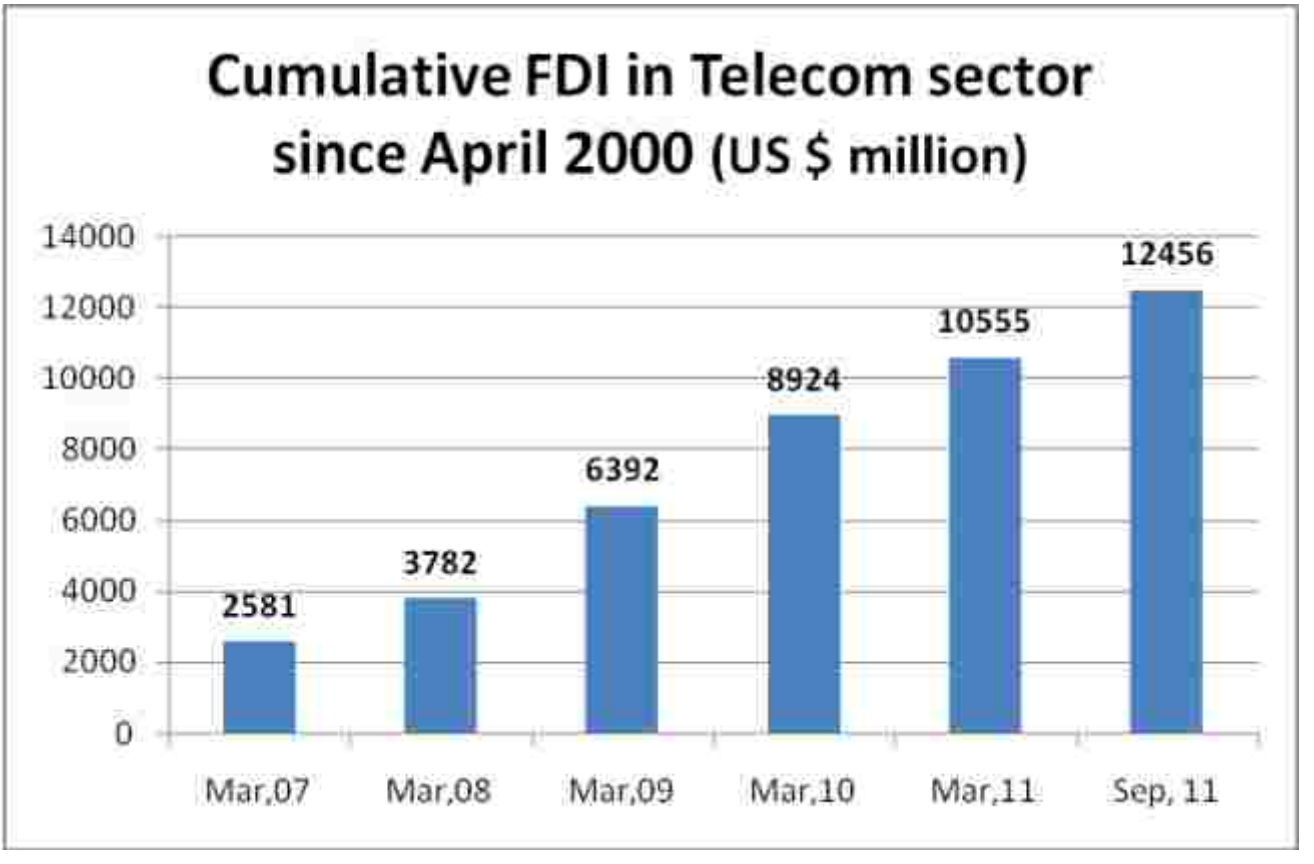
Sr. No.	Sector/Activity	FDI Cap/Equity	Entry route
1.	Basic and cellular, Unified Access Services, National/International Long Distance, V-SAT, Public Mobile Radio Trunked Services (PMRTS), Global Mobile Personal Communications Services (GMPCS) and other value added telecom services	74% (Both direct and indirect foreign investment).	Automatic upto 49%.FIPB beyond 49%.
2.	ISP with gateways, *ISP without gateway, Radio-paging, End-to-End Bandwidth provider.	74%	Automatic up 49%. FIPB beyond 49%
3.	Infrastructure Provider providing dark fibre, right of way, duct space, tower (Category –I); b) Electronic Mail and Voice Mail	100%	Automatic upto. FIPB beyond 49%
4.	Manufacture of Telecom Equipments	100%	Automatic

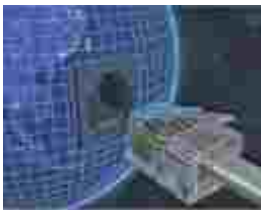
* The government had revised guidelines for ISPs on 24-8-2007 and new guidelines provide for ISP licenses with 74% composite FDI only.

Actual Inflow of FDI in Telecom Sector from April 2000 to September 2011 is US $12456 in million. Cumulative FDI data for last five years and current year is as under:

Cumulative FDI in Telecom Sector Since 2000	
Up to Year Ending	Cumulative FDI (US $ in million)
March 07	2581
March 08	3782
March 09	6392
March 10	8924
March 11	10555
Sept. 11	12456

Note: Amount includes the Inflows received through SIA/FIPB route, acquisition of existing shares and RBI's automatic route only.
Source: DIPP web-site





MANUFACTURE OF TELECOM EQUIPMENT:

The exponential growth witnessed by the telecom sector in the past decade has led to the development of the telecom equipment manufacturing and other supporting industries. With the advent of next-generation technologies and operators looking to roll out 3G and broadband wireless access services, the demand for telecom equipment has increased rapidly. In an attempt to capitalize on this opportunity, the Government and policymakers are focusing on developing the domestic manufacturing industry. The Indian equipment manufacturing sector has come a long way in the past few years. From being an import-centric industry, it is slowly but steadily moving towards becoming a global telecom equipment manufacturing hub. In 2002-03, India produced telecom equipment worth Rs. 144000 million, which increased to Rs. 520 000 million in 2010-11, registering a growth of 265 per cent.

One of the key reasons for this trend is the setting up of domestic manufacturing facilities by Indian companies along with multinational companies. The market is currently dominated by multinational companies which have set up their production facilities in the country over the past decade and many more are planning to set up. Also, with Indian as well as multinational companies setting up base in India, the country is not only emerging as a manufacturing hub but is also planning to increase its telecom exports each year. In 2006-07, India exported equipment worth Rs.18980 million, which increased by over 730 per cent to Rs.158380 million in 2010-11. Indian mobile handset companies increased their share in the domestic market to 14 per cent in 2009-10 from 3-4 per cent in 2008-09. Domestic brands have established themselves in the market and are competing with international handset vendors. The government is supporting the domestic equipment manufacturing industry and the growth of indigenous technology. With efforts from both the government and the industry, India can build a conducive ecosystem to boost the equipment manufacturing sector, which can lead to the creation of an industry that will compete with the best in the world.

To promote indigenous R&D and manufacturing for becoming self-reliant in telecom/ICT equipment manufacturing sector, various strategies have been proposed in the Draft National Telecom Policy 2011. In order to ensure focused indigenous development in the telecom sector, efforts would be concentrated towards a definite policy direction by creating a suitable road-map to align technology, demand, standards and regulations, after considered evaluation of candidate technologies and the emerging trends. It is proposed to create a fund to promote indigenous R&D, IPR creation, manufacturing and deployment of state-of-the-art telecom products. Emphasis will be given to creation of Indian IPRs which go into international standards as well as in product manufacturing in implementation of major programmes and projects as a vehicle to develop Brand India. With above initiatives India is expected to be a manufacturing hub for telecom equipment.

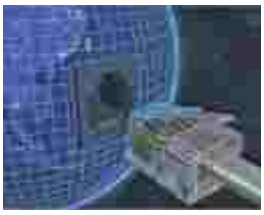
The export and import of Telecom Equipments during 2010-11 and projection for 2011-12 are as under:

During 2010-11	
Telecom Equipment Production	Rs.144000 Million
India's Export of Telecom equipments	Rs.158380 Million
India's Import of Telecom equipments	Rs.531020 Million
During 2011-12	
Telecom Equipment Production	Rs.520000 Million
India's Export of Telecom equipments (Projected)	Rs.165000 Million
India's Import of Telecom equipments (Projected)	Rs.530000 Million

INDIA TELECOM 2011

Department of Telecommunications in association with Federation of Indian Chambers of Commerce and Industry (FICCI) organized the 6th edition of India Telecom exhibition and conference i.e. "India Telecom 2011" from 7th to 9th December, 2011 at Pragati Maidan, New Delhi with the objective of promoting and showcasing the capabilities and opportunities in India Telecom sector, the theme was "M-Powering India". The conference brought the government, policy makers, potential investors, academia and non-governmental organizations together at a common platform to discuss how telecommunication can lead to an "all inclusive growth" of the Indian economy in terms of growth of GDP, employment and revenues, among others. The Prime Minister of India graced the occasion by addressing the participants of the event during the inaugural ceremony on 7th December 2011. The exhibition witnessed a huge success with more than 235 domestic and international IT/Telecom companies, participation was close to 20,000 ICT professionals from over 38 countries and 5 country pavilions.

Hon'ble Prime Minister of India Dr. Manmohan Singh releasing report on "m-Powering India" at "India Telecom 2011' at New Delhi



INTERNATIONAL COOPERATION

In the field of international cooperation, workshops, seminars and training programmes are held within the country and outside. Deliberations were held with the visiting foreign dignitaries, apart from the visits. Some of these are listed below:

Activities for the period 2010-12(April – December)
Bilateral Co-operation/ Multilateral Joint Commission Meetings.

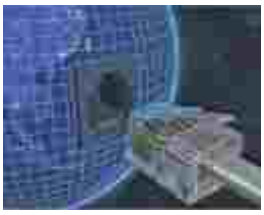
- Indian delegation led by Member (Services) participated in the TDAG – Telecommunication Development Advisory Group meeting held at ITU HQ, Geneva from 29 June to 1st July 2011. TDAG discussed and approved the Annual Operational plan and other activities regarding regional presence and also for setting up a committee for Capacity Building. For the Asia Pacific regional committee DDG (IR) DoT from India and one officer from Malaysia have been nominated by the TDAG.
- Assistant Secretary, U.S. Department of Commerce met Additional Secretary (T) DoT on 1.7.2011, to discuss the Draft Manufacturing Policy issues, Data Privacy & E-Commerce etc.
- A five member delegation led by Executive Vice Chairman from Nigerian Communication Commission (NCC) met the officers of DoT on Sept 5, 2011 to have the first hand experience of Indian Telecom Sector.
- On the sidelines of the International workshop organized by TRAI at Hotel Shangrila, New Delhi, a meeting was held on 06-09-2011 with Japanese Ambassador in India and Secretary General APT with Hon'ble Minister of Communications & IT. The purpose of the meeting was to solicit the support of India for the reelection of Japanese Ambassador as Secretary General APT during the General Assembly scheduled during Nov 16-18, 2011. India supported his candidature and he got reelected. The government of Japan has conveyed its gratitude and high appreciation to India for its support.
- Hon'ble Minister of Communications & IT inaugurated the Finnode set up by Govt. of Finland in India on September 27, 2011. The objective of the Finnode is to undertake innovation activities in the field of high-tech areas including Infrastructure ICT, Power as per the India's environment/ suitability. The inauguration was attended by the high level delegation from Finland which included H.E. Hon'ble Minister of Finland, Ambassador of Finland in India, besides the leaders of business delegation from Finland.
- A delegation led by Member (Technology) participated in 2011 session of ITU council held in Geneva during 10-22 October 2011. The council adopted several important resolutions with regard to operations planning, ITU overall functioning. An issue regarding adoption of suitable mechanism to prohibit unauthorized use of satellite communications was raised by India and the subject was included in the council business for further action by International conferences such as WRC, WTDC, and WCIT etc.
- A delegation led by Advisor (Operations) participated in the General Assembly and Management Committee of Asia Pacific Telecommunications, a regional inter-governmental agency (APT) held in

Jeju Island, South Korea during 16-24 November 2012. Besides deliberations on Policy and Overall management issues of APT, election for the posts of Secretary General, Deputy Secretary General, President and Vice-President of General Assembly took place.

- A high level delegation led by Hon'ble Minister of State for Communications & IT participated in the ASEAN TELMIN meetings during 5-9 December 2011 which were preceded by TELSOM meetings of ASEAN. India submitted the progress report for setting up of Tele-education and Telemedicine in CLNV countries.
- A delegation led by Vice-President of European Commission met the Hon'ble Minister of Communications & IT on 25.11.2011. It was informed during the meeting that European Parliament had decided to make more investment to fulfill the Digital Agenda and this gives rise to a basket of obligations. Issues regarding internet governance, opportunities in Indian Telecom sector and manufacturing were discussed. Vice-President extended her invitation to Hon'ble Minister of Communications & IT to visit Brussels as per his convenience. The Hon'ble Minister of Communications & IT agreed to accept her invitation and proposed that India and EU can together set up a complete roadmap for collaboration and cooperation in identified area of ICT, particularly in the field of cyber security, capacity building, setting up of international standards, reduction in trade barriers etc.
- Israeli Ambassador met Hon'ble Minister of State for Communications & IT (D) on December 4, 2011 to discuss the draft Telecom policy and draft Manufacturing policy. Need for joint collaboration between the Telecom sectors of both countries was also discussed.
- U.S Coordinator for International Communications and Information policy met Secretary (T) on Dec 12, 2012 to discuss the bilateral issues in the field of ICT.
- Director, Telecom Standardization Bureau, ITU met Secretary (T) at New Delhi on December 20, 2011. He discussed with Secretary (T) for active interactions and collaboration with ITU in the new areas of ICT such as International Telecommunications regulation, NGN.
- A bilateral meeting between the officials of Russian President's Special Communication Department and Officers from DoT, MTNL, DRDO and MEA took place on Dec 21, 2012 in Sanchar Bhawan to discuss the bilateral issues of cooperation between the two countries. From Russian side the delegation was led by Dy Chief of International Relations Division of the Russian Presentent's Special Communications Department. From Indian side the officers of IR Cell, DoT , General Manager(LC), MTNL and Under Secretary(Russia) , MEA were present in the meeting.

Foreign Visits:- Hon'ble Minister of Communications & IT, Hon'ble Minister of State for Communications & IT & Secretary (Telecom) from Department of Telecommunications

- Indian Delegation led by Hon'ble Minister of State for Communications & IT, Govt. of India presented Hon'ble Prime Minister's letter for IAFS-II by the AU Commission to invite Equatorial Guinea from 4-5 May, 2011.
- Indian Delegation led by Hon'ble Minister of Communications & IT, Govt. of India, participated in the World Summit on the Information Society (WSIS) Forum 2011 held at Geneva, Switzerland during 14-20th May, 2011.



- Indian delegation led by Hon'ble Minister of State for Communications & IT participated in HTIA Annual conference held at Jerusalem, Israel from 31st May to 2nd June, 2011.
- Secretary (T), DoT participated in the US-Indian Economic Opportunity and Synergy Summit held at Chicago, USA from 19-20 September, 2011 and subsequently participated in the 8th India Investment Forum held at New York, USA from 22-23rd September, 2011.
- Indian Delegation led by Hon'ble Minister of Communications & IT, Govt. of India, participated in the Summit on Information and Network Security at Helsinki, Finland from 18-21 September, 2011 & bilateral meeting at Estonia on 19th September, 2011 and holding bilateral meeting at Sweden from 22-24 September, 2011.
- Indian Delegation led by Hon'ble Minister of Communications & IT, participated in the Broadband leadership summit and ITU Telecom World 2011 at Geneva, Switzerland from 24-27 Oct, 2011.

OFFICIAL LANGUAGE (HINDI) ACTIVITIES

During the period 2011-12 (April –December), the following items of important work relating to progressive use of Hindi were undertaken by the Official Languages Division of DoT:

Implementation of Official Language Policy and the Annual Programme of the Government of India

All Sections, Attached and Subordinate Offices and Public Sector Undertakings under the administrative control of DoT were advised to comply with the provision of the Official Language Act, Rules and instructions issued thereunder for achieving the targets fixed by the Official Language Department in their Annual Programme for the year 2011-12. Quarterly Progress Reports regarding progressive use of Hindi in the Department, its attached and subordinate Offices and PSUs under the administrative control of DoT were reviewed and necessary instructions issued for taking corrective measures. Section 3(3) of the Official Language Act, 1963 was fully complied with during the period under review.

Monitoring and inspection

During the period fourteen inspections were conducted by the Second Sub Committee of the Committee of Parliament on Official Language in various offices/units and PSUs of the DoT spread through out India. The Official Language Division worked as a coordinator during the course of all such inspections. Official Language Division also conducted eight such inspections independently to ensure the compliance of the provisions of the Official Language instructions issued thereunder.

Official Language Conference

Joint Secretary (Admn.) and Joint Director (OL) of DoT participated in the "Antarrashtriya Hindi Sammelan" conducted by Bhartiya Sanskriti Sansthan in South Africa from 14th to 23rd June, 2011.

Official Language Implementation Committee

Quarterly meetings of Official Language Implementation Committee of the Department were held at regular intervals wherein the progress relating to the use of Hindi in official work in the Department was reviewed. During the year, four such meetings were held.

Training & Workshop

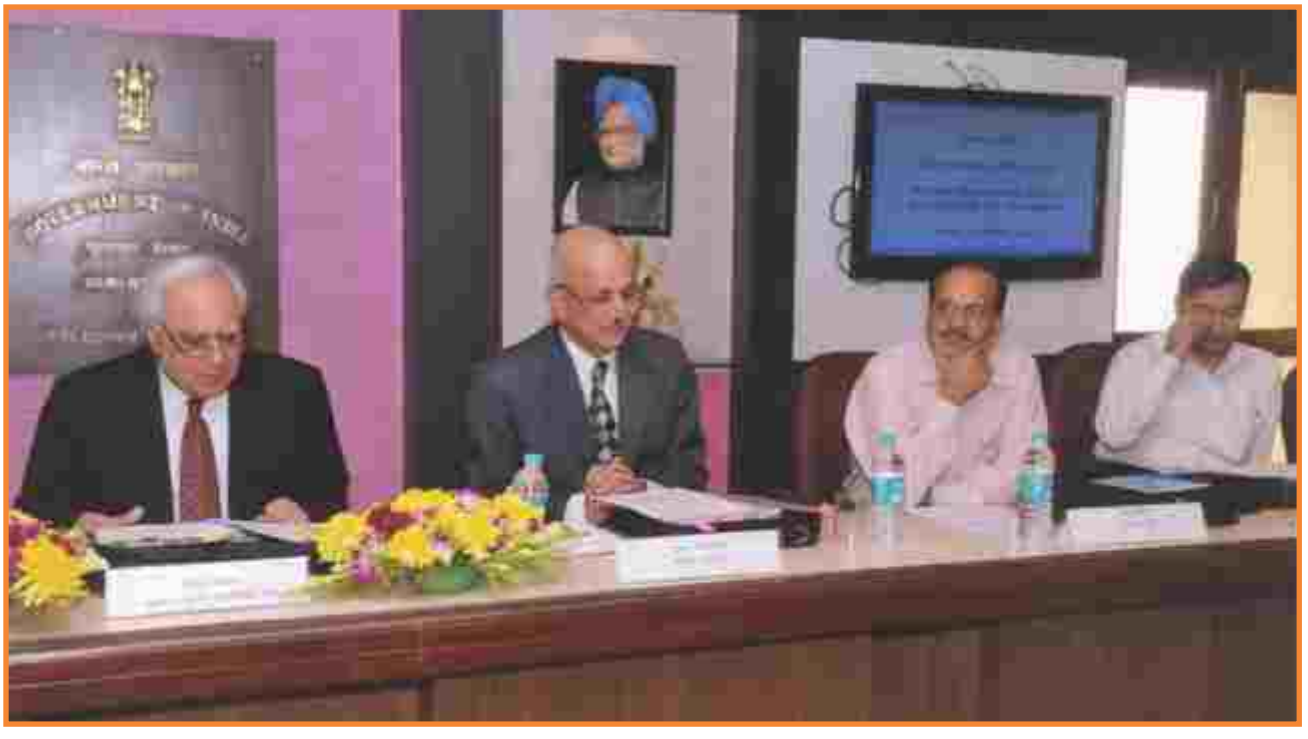
Some officials who did not have working knowledge of Hindi Stenography/Hindi Type writing were nominated for training for the session commencing from August, 2011. Two Hindi Workshops regarding the use of software and Unicode facility for facilitating the use of Hindi on computers were organized.

Celebration of Hindi Pakhwara

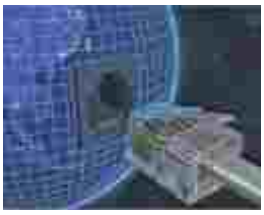
Hindi Pakhwara was organized from 14-30 September, 2011 in the Department. 14 competitions relating to the promotion of Official Language in the Department were organized.

Hindi Salahakar Samiti

Hindi Salahakar Samiti of DoT has been reconstituted on 11th December, 2010 as per the guidelines issued by the Department of Official Language. Its first meeting under the chairmanship of Hon'ble Minister of State for Home, Communications & IT was held on 29.3.2011 at Bangalore. Second meeting was held on 17.11.2011 in New Delhi at Sanchar Bhavan under the Chairmanship of Hon'ble Minister of Communication & IT.



Shri Kapil Sibal Hon'ble Minister of Communications & IT and Shri R. Chandrashekhar Secretary (T) at Hindi Salahakar Samiti meeting held on 17-11-2011 at New Delhi



STAFF WELFARE AND SPORTS ACTIVITIES

Under the Welfare Programmes, scholarships, book-awards and incentives are granted to meritorious school/college going children of the DoT employees. Besides this, conveyance allowance/hostel subsidy is also granted to mentally/physically challenged children of the employees. The programme also includes financial assistance to employees in distress and provides subsidies for recreation tours etc. During the year (April-December-2011), following activities were undertaken under the Welfare programme:

- Financial Assistance of Rs. 30,000/- (Rupees Thirty thousand only) was provided to the families of deceased employees.
- A Health Camp/Training Workshop for imparting training of breast self examination for cancer (exclusively for ladies) was conducted in Sanchar Bhavan on 10th August 2011.
- Officials of DoT (HQ) were deputed to participate in different sports events conducted by Northern Telecom Region (NTR)/ Bharat Sanchar Nigam Limited and Inter Ministry Tournaments.
- Book Award and Incentive were distributed to the meritorious school going children of DoT employees.
- All other activities of the previous year were also duly performed.

Welfare schemes and provisions for SCs & STs.

The welfare schemes `are largely gender neutral and composite in nature. However, some of the schemes namely Book Award, Scholarship Award contains pro women and SC/ST orientation by way of relaxation in marks for these categories. There is no earmarked amount for these categories as Book Awards/scholarships are awarded to the deserving applicants fulfilling the eligibility criteria. The expenditure incurred out of Staff Welfare Fund in respect of women and SC/STs is as under:

- Expenditure incurred on Women Welfare: Rs.7,11,000/-(approx)
- Expenditure incurred on Development of SC/STs: Rs. 4,05,700/- (approx)

GENDER BUDGETING

In the Department of Telecommunications the Gender Budget Cell was constituted in November 2006. The Cell was further reconstituted in April 2010. The Gender Budgeting Cell of the department is trying to generate awareness about the gender budgeting initiative of the Government and the manner in which the Department of Telecom can play a role in mainstreaming gender concern at the planning and formulating stage of various schemes in the sector.

Allotment of funds under plan and non plan head for the benefit of women for 2010-11 and 2011-12 are given below:

(Rs. in crore)

100% Women specific programmes						
Details of the scheme	BE 2010-11		RE 2010-11		BE 2011-12	
	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan
Amenities to staff	-	0.30	-	0.06	-	0.08
Universal Service Obligation Scheme	-	-	-	-	0.50	-

30% women Specific programmes (Non-Plan)			
Details of the scheme	BE 2010-11	RE 2010-11	BE 2011-12
Amenities to staff	0.10	0.10	-

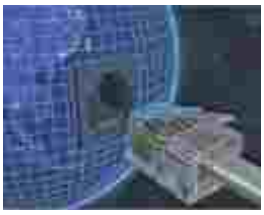
RIGHT TO INFORMATION ACT

A separate RTI Unit has been established in this Department and is functional since January 1, 2007. RTI Unit of department of Telecommunications is continuously in the process of strengthening the system of disposal of RTI applications to the satisfaction of the public. An RTI Unit with Director (Coord.) as CPIO, Under Secretary as APIO and RTI Section headed by a Section Officer is functioning as the Nodal Unit for the Department, its PSUs and autonomous bodies and other Departments/Ministries. In addition to the above, 69 CPIOs with additional First Appellate Authorities are functioning in DoT to facilitate quick disposal of RTI applications/appeals. In conjunction with IT Unit of this Department, the incumbency position of CPIOs and First Appellate Authorities are uploaded on the website of the Department of Telecom. During the year 2011-12, upto December 31, 2181 applications were received out of which 718 applications were transferred to other departmental Public Authorities and PSUs. Disposal of applications with information was approximately 99%. There was no denial of information except as per the provisions of the RTI Act.

PUBLIC GRIEVANCES AND REDRESSAL

Department of Telecom receives complaints directly in its Public Grievances Cell from the office of the Hon'ble Prime Minister, Minister of Communications and IT, MPs, MLAs, VIPs, Chairman's Office, Department of Administrative Reforms and Public Grievances (DARP&G) and from the public. Public Grievances Cell of DoT monitors complaints for their early and timely settlements. The details for the year 2011-12 (upto December 31) are given as under:

Opening Balance as on April 01,2011	Grievances booked during the period (April-Dec,2011)	Total	Grievances closed during the period	Balance as on December 31,2011
2996	54,226	57,222	53,349	3873



IMPLEMENTATION OF RESERVATIONS ORDERS FOR SCHEDULED CASTES/SCHEDULED TRIBES AND OBC EMPLOYEES

In accordance with the policy of the Government of India, a SCT cell is functioning in the Department of Telecommunications under the supervision of Director (Staff Relations) who has been appointed as Liaison Officer for SC/STs for the Department of Telecommunications. The Liaison Officer provides relevant guidelines not only to the officers in the Department but also to all Public Sector Undertakings, Autonomous Bodies, Statutory Bodies, Attached and Subordinate Offices under the Department of Telecommunications.

IMPLEMENTATION OF JUDGEMENTS/ORDERS OF CENTRAL ADMINISTRATIVE TRIBUNAL (CAT)

During the period 2011-12, 41 judgments/orders of Central Administrative Tribunal were implemented by the Department of Telecommunications.

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III. 1 Wireless Planning and Coordination

The Wireless Planning and Coordination Wing of the Department of Telecommunications deals with the spectrum management, wireless licensing, frequency assignments, international coordination for spectrum management and administration of Indian Telegraph Act 1885, (ITA, 1885), for radiocommunication systems and Indian Wireless Telegraphy Act 1933, (IWTA, 1933).

Code Division Multiple Access (CDMA)
Frequency Assignment for CDMA Networks

- The frequency in 869-889 MHz paired with 824-844 MHz is considered for assignments to CDMA networks and 1880-1900 MHz is considered for CorDECT based network for CDMA services.

- Assignments of frequencies for CDMA networks are made for various applications like CDMA/CorDECT based networks, point-to- point to multi-point networks in 6/7 MHz and 15/18 MHz band as appropriate for establishing compatibility of electromagnetic radiation to ensure interference free operation of all such networks with other available networks.

- As regards BWA services, six successful bidders of BWA spectrum in 2.3-2.4 GHz band have emerged through e-auction. LOI and frequency earmarking letters have been issued to them. Process of earmarking of MWA frequencies is in progress in respect of some BWA operators.

BSNL was awarded BWA spectrum in 2.5 GHz band and have rolled out WiMAX services in few service areas.

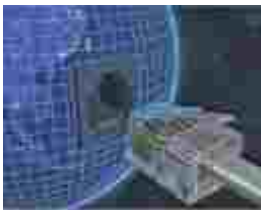
Satellite Coordination

International coordination of satellite systems is required to be undertaken as per the provisions of the International Radio Regulations (RR) of the International Telecommunications Union (ITU). Coordination of frequency assignments for the individual satellite networks is necessary with satellite networks of other administrations for mutual coexistence and interference free operations of these networks.

Actual for period 2011- 12 (April-December)
Satellite coordination with other Administrations

Operator level coordination meeting took place during September, 2010 with Singapore Telecommunications and during July and August, 2011 with GSS, Russia to resolve technical issues.

Coordination of KANOPUS-V (NGSO) satellite network of Russia with INSAT satellite networks of Indian Administration was communicated to ITU.



Coordination with ITU

Notifications:-

Frequency notices for registration requests for satellite networks INSAT-2(83) (83E), INSAT-EK55 (55E), INSAT-KU10 (111.5E) (111.5E) have been forwarded to BR for publication in BR IFIC of Radiocommunication Bureau.

Frequency notices for registration requests for satellite networks IRS-P5 (NGSO) and IRS-CARTOSAT-2 (NGSO) have been forwarded to BR for publication in BR IFIC of Radiocommunication Bureau.

Administrative Due-diligence:-

Administrative Due-diligence for INSAT-2(83) (83E) has been forwarded to ITU for publication in BR IFIC of Radiocommunication Bureau.

Co-ordination Request:-

Co-ordination Request in respect of Satellite Network INSAT-MET at 74, 81.5, 82, 83 and 93.5E respectively; INSAT-KU11 (48E), INSAT-KU11 (74E), INSAT-KU11 (83E), INSAT-KU11 (93.5E) and INSAT-KU11 (111.5E) have been submitted to ITU for publication in BR IFIC of Radiocommunication Bureau.

Advanced Publication Information:

Advanced Publication Information of YOUTHSAT (NGSO) and RESOURCESAT (NGSO), satellite network has been sent to BR for publication in IFIC.

INSAT-KA51 (51ºE); INSAT-KA68 (68ºE); INSAT-KA78 (78ºE); INSAT-KA85.5 (85.5ºE); INSAT-KA104 (104ºE); INSAT-KA107 (107ºE) INSAT-KA120 (120ºE), satellite network has been sent to BR for publication in IFIC.

INSAT-NAVR (32.5) (32.5ºE); INSAT-NAVR (83) (83ºE); INSAT-NAVR (120.5) (120.5ºE); INSAT-NAVR (121.5) (121.5ºE); INSAT-NAVR (123.5) (123.5ºE); INSAT-NAVR (124.5) (124.5ºE); INSAT-NAVR (125.5) (125.5ºE); INSAT-NAVR (126.5) (126.5ºE); INSAT-NAVR (127.5) (127.5ºE); INSAT-NAVR (128.5) (128.5ºE); INSAT-NAVR (129.5) (129.5ºE), INSAT-NAVR (130.5) (130.5ºE) and INSAT-NAVR-GS (NGSO) satellite network has been sent to BR for publication in IFIC.

FSS Plan as per Appendix-AP30B:- NIL

Protection of Indian space, Terrestrial and Radio Astronomy Services from the Satellite Networks of other countries.

Advanced Publication Information (API/s) published in BR IFIC in respect of satellite networks of France, Malaysia, Japan, Indonesia, Pakistan, Russia, Mauritius, Egypt, UAE, PNG, China, Cyprus, Singapore, UK, Italy, Austria, Polland, Vietnam, Israel, Saudi Arabia, LUX, Kazakhstan, Turkey, Australia,

Quatar, Norway, Canada and Korea Administrations were objected in view of existing and planned INSAT satellite networks.

Coordination requests (CR/Cs):- Frequency assignments published in BR IFIC in respect of satellite networks of Norway, Cyprus, China, LUX, Qatar, USA, Malaysia, China, UK, Germany, UAE, Egypt, UKRANE, Israel, Japan, Spain, Indonesia, France, Mauritius, Russia, PNG and Bangladesh Administrations were objected in view of existing and planned INSAT satellite networks.

Frequency notices for registration (Part I-S):- Frequency assignments published in BR IFIC in respect of satellite networks of UK, Russia, Japan, Italy and France Administrations were objected in view of existing and planned INSAT satellite networks.

FSS Plan as per Appendix-AP30B:- Frequency assignments in respect of satellite networks of Cyprus, UAE, Russia, Israel, Belarus, France, Saudi Arab, China, Malaysia and Monaco Administrations were objected in view of existing and planned INSAT satellite networks.

BSS Plan as per Appendix-30/30A:- Frequency assignments in respect of satellite networks of Holland, PNG, LUX, Malaysia and UAE Administration were objected in view of existing and planned INSAT satellite networks.

Following Indian satellite networks were published in the special sections of International Frequency Information Circular (BRIFIC):

Frequency notices for registration (Part II-S, I-S)

Part II-S in respect of INSAT-EK55 (55E), INSAT-KU10 (111.5E) (111.5E) satellite networks have been published.

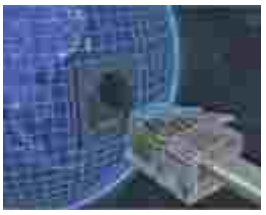
Part I-S in respect of INSAT-2(83) (83E) satellite networks have been published.

Coordination requests (CR/C)

Coordination requests (CR/C) in respect of INSAT-MET at 74, 81.5, 82, 83 and 93.5E respectively; INSAT-KU11 (48E), INSAT-KU11 (74E), INSAT-KU11 (83E), INSAT-KU11 (93.5E) and INSAT-KU11 (111.5E) of India has been published in International Frequency Information Circular of Radiocommunication Bureau (BRIFIC)

Advanced Publication Information

API/A (Mod) in respect of ESSELSAT-1 (98.5E) satellite network have been published.
API/A (Mod) in respect of INSAT-KA82 (82E) satellite networks have been published.
API/A/6817 in respect of YOUTHSAT (NGSO) satellite network have been published.
API/A/6816 in respect of RESOURCESAT (NGSO) satellite networks have been published.



FSS Plan Publications (AP30B) and BSS Plan publications (AP30/30A)

NIL

Administrative Due-diligence Publication:-

Due-diligence under RES-49/1382 Publication in respect of INSAT-2(83) (83E) location of Indian Administration have been published.

National Meetings:

Three national level meetings with the satellite operators have been conducted to discuss various satellite coordination issues. Two to Three national level meetings with the satellite operators are expected to discuss various satellite coordination issues.

Anticipated targets for the period (January –March 2012)

Coordination with ITU

Notifications:-

Frequency notices for registration requests for satellite networks INSAT-NAV-GS and INSAT-NAV-A-GS to BR for publication in BR IFIC of Radiocommunication Bureau.

Co-ordination Request:-

Co-ordination Request in respect of Satellite Network INSAT-NAVR and INSAT-NAV-NGSA at various locations is to be sent to ITU for publication in BR IFIC of Radiocommunication Bureau.

Advanced Publication Information:

Advanced Publication Information of any new network as and when requested by DOS shall be sent to BR for publication in IFIC .

Conferences

National Preparations, participation and follow-up action for various international and regional conferences under the aegis of International Telecommunication Union (ITU) and Asia-Pacific Telecommunity (APT) were undertaken to protect national interests especially in the context of spectrum management and radio communication related matters.

National Frequency Allocation Plan (NFAP):

Draft National Frequency Allocation Plan-2011 was finalized after consultation with all stakeholders and was placed on the WPC Wing website in April 2011.

National Frequency Allocation Plan-2011 was unveiled by the Hon'ble Minister of Communications and IT on 30 September 2011. NFAP-2011 is applicable from 01 October 2011.

National Preparatory Committee (NPC)

The NPC for WRC-12, which has been constituted to coordinate and harmonize national views on various agenda items of WRC-12 for formulating Indian proposals for the work of the Conference as well as for finalizing Indian view-points on proposals of other administrations, met four times.

Five of Indian Proposals on various Agenda Items of ITU-R World Radiocommunication Conference-2012 (WRC-12) were included in the Preliminary APT Common Proposal for consideration of the ITU-R WRC-12 which is scheduled at Geneva, Switzerland from 23 January to 17 February 2012.

Thirty three Indian proposals on 9 Agenda Items of WRC-12 were finalized in the NPC meeting, and were submitted for consideration of WRC-12 for protecting national interests during the meeting of WRC-12 in Geneva from 23 January to 17 February 2012

PROJECT IMPLEMENTATION

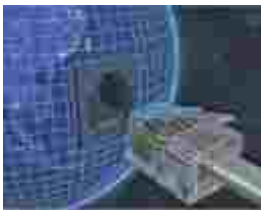
The project 'Design, Supply, Installation & Commissioning of "National Radio Spectrum Management & Monitoring System (NRSMMS)" has been implemented by the WPC Wing. Under the project, spectrum management and monitoring functions have been automated with a view to make these activities effective and efficient.

Actual achievements from April to December 2011:

- The SHF portion (fixed & Mobile) of the NRSMMS contract has been terminated. The recoveries against SHF and Liquidated Damages charges have been made against the termination of SHF Part of the project by encashing the Bank Guarantees.

- After termination of Annual Maintenance Contract (AMC) with the Contractor, maintenance of the facilities procured under NRSMMS project are being carried out by the WPC/WMO officers & staff.

- The Contractor has referred disputes to Adjudication, which was completed in June 2011. Department has rejected the Adjudicator report.



- Both the contractors filed cases before Hon'ble Delhi High Court. One FAO (OS) was also filed by M/s Thales, France before Hon'ble Double Bench of Delhi High. Both the OMPs & FAO(OS) have however been disposed-of by Hon'ble high court.

- The Contractors filed the cases before Hon'ble Delhi High Court against the notice for encashment of Bank Guarantees. These cases have been disposed of by the Hon'ble High Court of Delhi.

- The Adjudicator's report has been rejected by the Department and initiated the process for setting up Arbitration to resolve the disputes in accordance with the Contract clause. Arbitrator from the Employer side to proceed with the Arbitration has also been appointed.

Anticipated achievements from January to March 2012:

- Follow up of Arbitration
- Monitoring of maintenance of facilities installed under NRSMMS project
- Making spill over payments, to the Contractors as decided by Arbitrator

Regulations

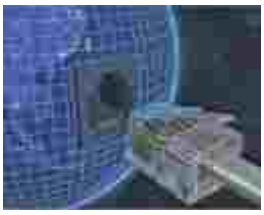
Actual Achievements, activities and performance for the period: April – December, 2011:

Regulation cell is responsible for formulation of new rules and amendment to the existing rules under Sections 4 and 7 of the Indian Telegraph Act ,1885 and Section 4 and 10 of the Indian Wireless Telegraph Act ,1885 ; coordination with Regional Licensing offices,TRAI,DGFT etc.

Proposal to delicense frequency band 433 – 434 MHz:

Based on requests received from various applicants, proposal to delicense frequency band 433 – 434 MHz has been processed for the usage of low power Radio Frequency devices in the frequency band 433 – 434 MHz band and to work in license free conditions in the band subject to compliance of certain technical parameters on non-interference, non-protection and shared (non-exclusive) basis.

Achievements	Actual 2011-12	Anticipated Jan-Mar 2012
1.1 Radio Frequency Spectrum Management		
New Radio Frequency authorized to various users	123385	26391
Frequency assignments intimated to Radio-communication Bureau of ITU for registration		
Radio Frequency Assigned for visits of VVIPs		
SACFA (Standing Advisory Committee on Frequency Allocations) meeting held		
Inter-departmental meetings held		
Sites cleared for new wireless stations	205168	70000
No. of Special Monitoring cases		
1.1 Wireless Licences Issued		
No. of Import Licences Issued	2405	904
No. of Licences issued to new Wireless Stations	102420	27211
No. of lLicences Renewed (for Wireless Stations)	39686	12226
1.1 Certificate of Proficiency (COP) Examination/Licences		
No. of COP Examination conducted	41	13
No. of candidates admitted	8175	4875
No. of Licences issued	3064	1599
No. of Licences renewed	3673	1185
No. of Licences issued to New Radio Amateur Stations	161	100
No. of Licences renewed for Old Radio Amateur Stations	275	150



WIRELESS MONITORING ORGANISATION (WMO)

Wireless Monitoring Organization continues to provide interference-free wireless services in the increasingly crowded radio environment besides providing vital technical data for the introduction of new services such as 3G, BWA etc. to WPC wing.

Radio Monitoring — a regulatory and treaty requirement.

Radio monitoring service, a regulatory and treaty requirement, is carried out by the Wireless Monitoring Organisation of the Wireless Planning & Co-ordination Wing (WPC Wing), Ministry of Communications and IT, for the Government of India. It is essentially technical in nature and its broad objectives are derived from the international treaty document — Radio Regulations of the International Telecommunication Union.

The Preamble of the Radio Regulations stipulates the following broad objectives for the radio monitoring service of every Member State of the International Telecommunication Union.

- to facilitate equitable access to and rational use of the natural resources of the radio-frequency spectrum and the geostationary-satellite orbit;
- to ensure the availability and protection from harmful interference of the frequencies provided for distress and safety purposes;
- to assist in the prevention and resolution of cases of harmful interference between the radio services of different administrations;
- to facilitate the efficient and effective operation of all radio communication services;
- to provide for and, where necessary, regulate new applications of radio-communication technology.

Major functions of Wireless Monitoring Organisation (WMO)

With the above listed objectives forming the core functions of the WMO, the national spectrum management body the WPC Wing requires a number of services from the WMO. In practical terms, the major functions of the WMO are as under:

Resolution of the harmful interference;

Monitoring for identification of frequency sub-bands for introduction of new services and/or for additional allocation to existing services;
Monitoring for spectrum recovery — unused/ under-used frequency authorizations;

Monitoring for ensuring adherence to license conditions;

Monitoring / measurements for sharing studies;

Assistance to domestic wireless users;

Assistance to foreign administrations;

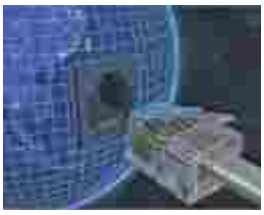
Participation in special monitoring campaigns of the International Telecommunication Union;

Measurements on radio emissions (intentional & non-intentional) for the possible introduction of new radio communication standards, and also for studying the EMC compatibility of the proposed new installations;
Inspection of licensed installations; and
Monitoring of space emissions to protect authorized satellite transmissions.

Challenges before WMO

The increasing dependence of the society (the Government and the public alike) on the wireless communications demands WMO to ensure interference free radio communication environment. Therefore, WMO's primary focus, at present, is on public mobile radio communication services, public broadcasting services and safety-of-life services. WMO is earnestly gearing up its resources — manpower and machine-power — to ensure that these services continue to operate in interference-free environment. The primary reason for the interference protection to these services lies in their critical importance to the society as a whole. With respect to public mobile cellular service, WMO has twin objectives: (i) to identify and eliminate the sources of interference occurring due to a multitude of reasons, and (ii) to find unused spectrum for expansion of existing 2G services and for the 3G services. In so far as public broadcasting is concerned, its transmissions have been found to be affecting aeronautical mobile communications (civil aviation) and also infringing licensing parameters. To address the needs of such crucial services, WMO is in the process of procuring custom-designed radio monitoring products. Beside the service-aspect of radio monitoring, .

Having completed all the formalities, six new Wireless Monitoring Stations have been established at Bhubaneswar, Dehardun, Lucknow, Patna, Raipur and Vijayawada in current financial year under 11th Five Year Plan (2007-12). One technical staff has been posted at each of six new monitoring stations to procure the necessary facilities for running the office. The technical infrastructure for these six additional Wireless Monitoring Stations would more effectively address the monitoring needs of public mobile and broadcasting services than what is currently available to other Wireless Monitoring Stations. To this end, WMO has initiated the process of finalizing tender document after the necessary approval by competent authority for the procurement "Six Vehicle mounted Monitoring Terminals with Portable Monitoring equipments and network analysis and coverage measurement equipments". The expected cost of these facilities is about Rs. 28.0 crore and the procurement is to be effected in 2012-13.



The case for the procurement of land for the new Wireless Monitoring Stations was taken up with the respective State Governments in 2007. With continuous pursuit, WMO has already procured land at Bhubneshwar, Dehradun and Naya Raipur from the respective State Governments for establishing Wireless monitoring Stations.

WMO effectively and efficiently addresses new monitoring challenges emerging from the increasingly crowded radio frequency spectrum. WMO has taken steps to introduce new technologies and capacity-building. As for new technologies, procurement of software and hardware has already been initiated. Intensive training on monitoring as well as information technology is aimed at capacity-building. These two aspects are being jointly handled by the Monitoring Headquarter and Training and Development Centre, New Delhi.

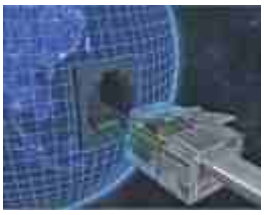
Satellite Monitoring Earth Station at Jalna (Maharashtra) continues the monitoring of signals from all satellites located in the Geo-arc of interest to India. Its measurement functionality is planned to be enhanced in the near future.

Wireless Monitoring Stations have started functioning from the newly constructed buildings at Bhopal & Visakhapatnam. The construction of the office buildings work in progress at WMSs Jallandhar, Mangalore and Siliguri has been initiated. Construction of office building of Wireless Monitoring Station, Manalore is in completion stage. Further, preliminary estimate prepared by CPWD for the new building at Nagpur is under the process of financial concurrence.

WMO has undergone major modernization of Radio Spectrum Monitoring capabilities through World Bank assisted Telecom Reform Project. Under this project, 21 V/UHF Mobile Monitoring Terminals were procured. Additionally, two HF DF facilities were also procured.

Statistical performance data during first nine months of the current year i.e. 01-04-2011 to 31-12-2011 and anticipated performance during 01-01-2012 to 31-03-2012 is given below:-

S. No.	Particulars	Actual achievements during April-December 2011	Anticipated achievement during January-March 2012
1.	Monitoring Assignments Handled.	8125	2800
2.	No. of Wireless Transmission monitored.	105632	35000
3.	Technical assistance to users to maintain their operation within specified standards.	515	200
4.	Infringements communicated to various wireless users for remedial action.	3347	1100
5.	Channel days utilized for Radio Monitoring.	4784	1595
6.	No. of Wireless Stations Inspected.	6886	2295
7.	No. of Radio Noise measurements.	197635	44000
8.	No. of high priority interference complaint resolved.	61	20
9.	No. of standard interference complaint resolved.	11	4
10.	Man days devoted for high level technical work.	336	120
11.	No. of training courses conducted.	04	03
12.	No. of man days for training.	330	250



III. 2 Telecommunications Engineering Centre

Telecommunications Engineering Centre (TEC) is the Technical wing of the Department of Telecommunications. Its responsibilities, among other things include:

- Preparing Standards and Specifications for harmonious growth of the Indian Telecom Network and Services for the public as well as private sector operators.
- Carrying out evaluation of equipment and services.
- According approvals for equipment, technology and services.
- Studying new technology and services and give technical advice to DoT for their introduction in the Indian Telecom Network.
- Technical support to DoT.
- Technical advice to TRAI, TDSAT, USOF, BSNL and MTNL, on request of DoT.
- Drawing up Fundamental Technical Plans of DoT.
- Interaction with multilateral agencies like APT, ETSI and ITU through DoT.
- Creating facilities to further the objectives of MRA.
- Develop necessary expertise to imbibe the latest technologies and results of R & D.
- Coordinate with C-DoT to provide details on the technological developments in the Telecom Sector for policy planning at DoT level.

Achievements

1. During the period from April 2011 to December 2011, TEC issued 7 new GRs/IRs and revised 17 GRs/IRs. For the new and revised GRs/IRs, 24 Test Schedules/ Test Procedures were prepared.

2. As part of its activity for according approval for equipment, technology and services the Centre issued the following approvals during the period April-December 2011:
   - 111 Interface Approvals for equipment interfacing with other network
   - 50 Certificates of Approvals for network of private operators
   - 8 Type Approvals/Service Approvals for equipment.

3. Revenue collected from various vendors as test fee and sale of documents, during April 2011 – December 2011 was Rs. 1.26 crore.

4. The Centre continued to render expert advice on switching and transmission issues to DoT, TRAI, and TDSAT.

5. With a view to keep abreast with latest developments in new technologies, and also to protect interests of India, TEC participated and also made presentations in a number of international meetings. International meetings in which TEC participated are as under:

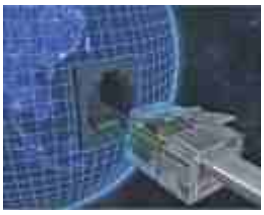
- Training conducted by ITU-ASP on '4G Mobile (IMT Advanced) System' at Pusan, Korea.
- Study visit for NGN Lab Project to San Jose, USA
- Asia Pacific Regional Forum on ICT' at Bangkok, Thailand.
- ITU-T Study Group 15 meeting at Geneva.
- ITU-R working Party 5D meeting at Goa.
- ITU-T Study Group 13 meeting at Geneva.
- ITU-T Study Group 11 meeting at Geneva.
- ITU-T Study Group 5 meeting at Seoul, South Korea.
- TRAI APT workshop on 'Regulatory framework for emerging technologies'
- APNIC-32 meeting on IPv6 in Busan, South Korea.
- APG12-5 meeting at Busan, South Korea.
- ITU-R WP5D meeting at Waikoloa, Hawaii, USA
- ITU-D/ITU-R joint rapporteur group meeting at Geneva.
- ITU-R advisory group meeting at Geneva.
- Indo-US Joint Working Group meeting at Washington.
- Meeting with Nav 6 delegation from Malaysia for IPv6 implementation and for co-operation between India & Malaysia.

6. International meetings in which TEC made the presentations are as under:

- Presentation on 'Standardisation in India' in ITU-T workshop at Delhi.
- Presentation on 'Indian contribution on Deep Packet Inspection' in ITU-T Study Group 13 meeting at Geneva.
- Delivered lecture in IETE seminar on 'Wireless vision' at Lucknow.
- Contribution on DPI (Deep Packet Inspection) submitted to ITU-T Study Group 13
- A paper on 'Cloud Computing, Relevance for Mobile Service Provider' was accepted in Communic Asia 2011 conference and paper was presented in the conference.

7. Courses conducted by National Telecommunication Institute, at ALTTC Ghaziabad

- One week course on 'Radio Communication'.
- Two day workshop on 'BWA' in coordination with Tamilnadu and Chennai TERM Cells.
- One day workshop on 'Mobile Radio Trunking Technology'
- One day seminar on 'Smart Grid-opportunities and challenges'.
- One day workshop on 'मानक वर्तनी के प्रयोग के सम्बन्ध में जानकारी'.
- One day workshop on 'RTI Act, 2005'.
- One week course on 'Structure of Networks, Interconnections and Service Provisioning'.
- 5 days training on 'Cyber Security'.



8. TEC conducted important meetings of various National Working Groups.

9. Other important activities undertaken by TEC during the period are as under:

- Celebration of 'World ICT & Telecom Day' by arranging a conference at TEC.
- Release of quarterly TEC Newsletters on various technologies.
- Participation in the meeting on 'Standard Operative Procedure (SOP) ' for coordination of Telecommunication support and provision of service during emergency of natural disasters.
- Arrangement of 'हिन्दी कार्यशाला'.
- Release of White paper on 'Deep Packet Inspection'.
- Participation in BIS ET11 meeting.
- Participation in meeting related to security in MHA
- Release of Compendium on 'Rural Communication'
- Arrangement of 'हिन्दी पखवाड़ा' from 14.09.2011.
- Participation in meeting on 'IPv6 Application and Roadmap' at Guwahati.
- Presentations on 'NGN Numbering and Addressing' and 'NGN Standards and Interfaces in the Indian Context' were delivered at TRAI Seminar.
- Publication of Hindi Annual Grah Patrika 'टी ई सी संचारिका 2011'.
- Release of Compendium on 'IPv6' activities'.

III. 3 Universal Service Obligation Fund

Organizational Structure

The Universal Service Obligation Fund formed by an Act of Parliament is headed by the Administrator USO Fund, appointed by the Central Government, for the administration of the Fund. He is empowered to formulate procedures for implementation of USO Fund schemes and disbursement of funds from USOF. His office works as an Atached office of the Department of Telecommunications.

Current status of ongoing activities:

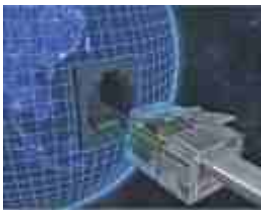
Public Access

Agreements were signed with M/s BSNL in November 2004 to provide subsidy support for provision of VPTs in 62302 uncovered villages in the country excluding those villages having population less than 100, those lying in deep forests and those affected with insurgency. The provision of VPTs in these villages has been included as one of activities under Bharat Nirman Programme. As on 31.12.2011, 62046 VPTs have been provided under this scheme.

Actual achievements during 2011-12 (up to Dec 2011)	Anticipated achievements during January - March 2012
16	256

Reconciliation of the VPTs working in the inhabited villages as per Census 2001 was carried out taking into account the existing VPTs and those provided under Bharat Nirman Programme. All the remaining 62443 inhabited villages as on 31.10.2007 as per Census 2001 irrespective of criteria of population, remoteness, accessibility and law & order situation have been included for provision of VPTs with subsidy support from USO Fund under this scheme. Agreements in this regard were signed with BSNL on 27.02.2009. A total number of 52086 VPTs have been provided under this agreement as on 31.12.2011. The remaining VPTs are likely to be provided in a phased manner by May 2012. As on 31.12.2011, a total of 579888 villages, out of a total numbers of 593601 inhabitated villages, as per census 2001 have been provided with VPTs, as per the details given at Table 4 of the Chapter on Statistical Supplement.

Actual achievements during 2011-12 (up to Dec 2011)	Anticipated achievements during January - March 2012
726	9274



Agreements were signed with BSNL for replacement of 1,85,121 number of VPTs in September 2003 and March 2004, which were earlier working on Multi Access Radio Relay (MARR) technology and installed before 01.04.2002. A total number of 1, 84,775 MARR VPTs have been replaced by BSNL till 31.12.2011.

Actual achievements during 2011-12(up to Dec 2011)	Anticipated achievements during January - March 2012
105	346

Individual Access

A MoU was signed with BSNL on 12.03.2009 based on which subsidy support of Rs. 2000 crore per annum for a period of three years is being given from USOF to BSNL for operational sustainability of their Rural Wire line Household DELs installed prior to 01.04.2002 in lieu of ADC having been phased out. A financial support of Rs.5907.61/- crore has been provided by USOF to BSNL under this MoU till 30.11.2011.

Infrastructure Support for Mobile Services

A scheme has been launched by USO Fund to provide financial support for setting up and managing 7353 number of infrastructure sites/ towers (revised from 7871) in 500 districts spread over 27 states for provision of mobile services in the specified rural and remote areas, where there was no existing fixed wireless or mobile coverage. Villages or cluster of villages having population of 2000 or more and not having mobile coverage were taken into consideration for installation of tower under this scheme. The number of towers was subject to change based on actual field survey and coverage achieved thereof as per the terms and conditions of the Agreements, effective from 01.06.2007, signed with the successful bidders in May 2007. As on 31.12.2011, 7296 towers have been set up under this scheme. Utilizing the infrastructure so created, BTSs are being commissioned and mobile services started by different Universal Service Providers from these towers in a phased manner.

Actual achievements during 2011-12 (up to Dec 2011)	Anticipated achievements during January - March 2012
20	57

Rural Broadband Scheme for expanding provision of Wireline Broadband Connectivity upto village level

For providing broadband connectivity to rural & remote areas, USOF signed an Agreement with BSNL on January 20, 2009 under the Rural Wireline Broadband Scheme to provide wire-line broadband connectivity to rural & remote areas by leveraging the existing rural exchanges infrastructure and copper wire-line network. The speed of each of the broadband connections shall be at least 512 kbps always on. Under this scheme, it was envisaged that BSNL will provide 8, 88,832 wire-line Broadband

connections to individual users and Government Institutions and will set up 28,672 Kiosks over a period of 5-years, i.e. by 2014. The scheme provides for subsidy for (i) broadband connections, Customer Premises Equipment (CPE), Computer/Computing devices (ii) setting up of Kiosks for public access to broadband services. The estimated subsidy outflow was Rs. 1500 crore in 5 years time that includes subsidy for 9 lakh broadband connections, CPEs, computers/computing devices and Kiosks. As on 31.12.2011, a total of 3, 38,617 broadband connections have been provided and 6729 kiosks have been set up in rural and remote areas.

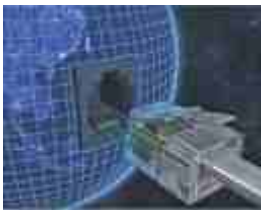
Actual achievements during 2011-12 (up to November 2011)	Anticipated achievements during December 2011 - March 2012
72679 Broadband Connections and 2537 Kiosks	177321 Broadband connections and 5463 Kiosks

Optical Fibre Network Augmentation, Creation and Management of Intra-District SDHQ-DHQ OFC Network in service area of ASSAM

A Scheme has been launched to provide sufficient back-haul capacity to integrate the voice and data traffic from the access network in the rural areas to their core network by strengthening the OFC network. This scheme considers OFC Network augmentation between the blocks' HQ and Districts' HQ to begin with. USOF, through this Scheme, shall provide subsidy support for augmentation, creation and management of intra-district SDHQ-DHQ OFC Network on the condition that it will be shared with other Telecom Operators at the rates prescribed in the Agreement. Assam has been taken up first for implementation. The tender for Assam was floated on 30.10.2009 and BSNL declared successful at the subsidy quote of Rs. 98.89 crore. Subsequently, an Agreement was signed with BSNL on 12.02.2010 to implement the scheme in Assam.

All locations shall be connected on physical OFC Ring Route(s) with the DHQ node ensuring the cable route diversity and ring capacity of at least 2.5 Gbps, with the capability to efficiently transport various protocols, including TDM, IP, Frame Relay, ATM, etc., for integrated voice, data and video signals in all districts of Assam within 18 months from the date of signing of the Agreement. The Agreement shall be valid for a period of seven years from the effective date. At least 70% of the subsidized bandwidth capacity, created under the scheme, shall be shared with the licensed service providers in the area of Assam at a rate not more than 26.22% of the current TRAI ceiling tariffs. Out of 354 nodes 174 have been installed as on 30.11.2011.

Broadband connectivity upto Gram Panchayat by National Optical Fiber Network (NOFN): Government has approved a project for National Optical Fiber Network in October, 2011 for providing Broadband connectivity to all 2.5 lakh Gram Panchayats at a cost of Rs. 20,000 crore. The plan is to extend the existing optical fiber network up to Panchayats. The Network will be available to telecom service providers for providing various services to the citizens in non-discriminatory manner. The Network will provide a highway for transmission of voice, data and video in rural areas. It will enable the broadband connectivity upto 2 Mbps, capable of providing various services like e-education, e-health, e-entertainment, e-commerce e- governance etc. to people and businesses. The people in



rural areas, students, entrepreneurs, various Government Departments providing services under e-governance projects will be benefitted. It will also provide connectivity to various public institutions like Gram Panchayats, Primary Health Centres (PHCs), schools etc. in rural areas. It will also result in investment from the private sector both for providing different services and for manufacturing of broadband related telecom equipment. The project will be funded by Universal Service Obligation Fund (USOF). The project will be executed by a Special Purpose Vehicle (SPV) which will be a company incorporated under Indian Companies Act 1956 and initially will be fully owned by Central Government, with equity participation from Government and interested Central Public Sector Units (CPSUs) (BSNL, Railtel, Powergrid, GAILTEL, etc.) and action is being taken to establish and operationalize a Special Purpose Vehicle (SPV).

Status of Disbursements made and availability of Funds

(Rupees in crore)

Financial Year	Funds collected as USL	Funds allocated	Funds disbursed	Reimbursement of LF and spectrum charges	Balance
2002-03	1653.61	300.00	300.00	2300.00	
2003-042	143.22	200.00	200.00	2300.00	
2004-05	3457.73	1314.59	1314.59	1765.68	
2005-06	3215.13	1766.85	1766.85	582.96	
2006-07	3940.73	1500.00	1500.00		
2007-08	5405.80	1290.00	1290.00		
2008-09	5515.14	1600.00	1600.00		
2009-10	5778.00	2400.00	2400.00		
2010-11	6114.56	3100.00	3100.00		
2011-12 upto (31.12.11)	3349.44*	2100.00	1575.08		
Grand Total	**40573.36**	**13471.44**	**15046.52**	**6948.64**	**17646.69**

Notes:-

I. UAL collection started from the year 2002-03.

II. The UAL collection figures in Col. (2) have been taken as per booked figures in DoT Accounts.

III. Payment under Col. (5) have been taken as per the decision of Ministry of Finance vide letter dated 04.06.2008.

*As on 30.11.2011.

III. 4 Controller of Communication Accounts Offices

With the expansion of the range of functions delegated to DOT Cells in all Telecom Circles beyond the mere settlement of pension and terminal benefits, the nomenclature of these DOT Cells was changed to office of Controller of Communications Accounts. The role of the CCA offices flows from the various policy initiatives taken over a period of time. The CCA Unit has evolved into a crucial professional interface between the Department of Telecom and its stakeholders on various issues, such as license fee and spectrum charges, USO fund disbursement etc.

I. FUNCTIONS BEING PERFORMED BY THE CCA OFFICES

The 26 CCA Offices are located across the length and breadth of the country and perform the following vital functions:

(A) DISBURSEMENT OF TERMINAL BENEFITS:

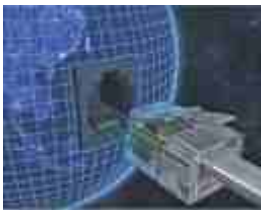
(I) PENSION: With the promulgation of Rule 37 (A) of the CCS Pension Rules, the government has a critical role in the payment of pension to the erstwhile government servants absorbed in BSNL. The CCA Unit is responsible for budgeting of pension expenditure and authorization of retirement benefits on CDA and IDA scale. Presently, the CCA offices are disbursing pension to over 2 lakh pensioners.

Financial Year	No. of Pensioners (in lakh)	Pension disbursed (Rs.in crore)
April to December,2011	2.2	2915.01

(ii) PENSION CONTRIBUTION AND LEAVE SALARY: The CCA offices carry out the functions of collection, scrutiny and monitoring of the amounts to be received as pension contribution and leave salary by the government.

iii) GPF & LONG TERM LOANS ACCOUNTING: The CCA offices are also responsible for maintenance of GPF, long term loans and advances and their recovery/accounting.

(iv) AUDIT FUNCTIONS: The CCA Offices have been exercising post audit on the disbursements made by the designated banks and post offices on account of the pension and allied benefits to the pensioners. The CCA offices carry out the internal audit of field offices comprising of Wireless Monitoring Services, Telecom Enforcement Resource & Monitoring Cells, Regional Telecom Engineering Centers and Regional Licensing offices.



(v) **FUNCTIONING AS CPIOs UNDER RTI ACT, 2005:** Officers in the offices of CCA have been designated as Central Public Information Officers (CPIO) and Departmental Appellate Authorities (DAA) for ensuring smooth provisioning of information under the RTI Act 2005 for all matters being dealt with by CCA offices.

(B) ACCOUNTS

CCA office is the basic unit of departmentalized accounts organization and performs the PAO and DDO functions for field office like TERM, WMO and RLO. Preparation and submission of the accounts has been greatly streamlined by employing information systems effectively in the CCA offices. Department of Telecom in 2011-12 achieved complete integration of submission of accounts through COMPACT software, with "e-lekha". E-lekha is an e-governance initiative of CGA office, wherein the accounts are uploaded by all the Ministries online. Following this integration, online accounting information is available upto object head level to the management from the e-lekha site. Manual input of data has been completely done away with in the Principal Accounts Office (DOT Accounts HQ.).

(C) ASSESSMENT & REVENUE FUNCTIONS:

(I) **COLLECTION OF LICENCE FEE:** The CCA is responsible for the assessment & collection of license fee as a percentage on revenue share from all cellular, basic and unified access service licensees together with the scrutiny of documents submitted by them viz. AGR (Adjusted Gross Revenue) statements and Affidavits. CCA offices deal with license fee related work of licensees under the UASL/basic/CMTS/NLD/other services. Recently in a landmark judgment, the Hon'ble Supreme Court upheld the definition of the AGR (Adjusted Gross Reserve) in the license agreement which had been challenged by the Telecom Service Providers. The Government's financial interest stands protected and significant license fee revenues are now out of the ambit of litigation/dispute.

(ii) **VERIFICATION OF DEDUCTIONS:** As per the license agreement, licensees claim deductions while arriving at the AGR for the license fee payment. These deductions, (on account of pass through charges, roaming service charges, sales tax, service tax) are verified on a quarterly basis by the CCAs. The deductions claimed by the licensees vary from 25% to over 90% of the gross revenue under different categories of licenses.

(iii) **COLLECTION OF SPECTRUM CHARGES:** The work relating to collection of spectrum charges in respect of cellular operators on revenue sharing basis has been delegated to CCA offices since 1st April, 2004. The spectrum fee at a prescribed percentage of the revenue is collected in advance in each quarter.

(iv) **MAINTENANCE OF FINANCIAL BANK GUARANTEES:** The work of maintenance, renewal, revision and invocation of the financial bank guarantees submitted by the licensees has been entrusted to the CCAs.

(v) The license fee and the spectrum charges collected from the Telecom. Service Providers are a major source of non-tax revenue to the Govt. of India. Amount collected during the last three years on this account is given in the following Table:

(Rs. in Crore)

Items	2008-09	2009-10	2010-11	2011-12 (up to Nov. 2011)
License Fee	9511	9778.52	10286.44	5639.03
Spectrum Charges	3455	3809.54	3433.23	3722.63
Auction Revenue			106264.73	

(D) USO RELATED FUNCTIONS:

The USOF is disbursed and monitored at the State level by the offices of CCAs. While performing the USO functions the CCAs are verifying the claims before the funds are disbursed. They also carry out physical inspection and monitoring, for establishing the veracity of claims. In addition the CCAs act as an interface between service providers. They also interact with the state Governments. Amount of USO Fund disbursed during the year is given in the Table below.

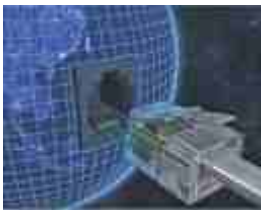
(Rs. in Crore)

Sl. No.	Items	Actual Achievement from April to December-2011	Anticipated disbursement for January to March 2012
1.	**USO Fund Disbursed**	**1575.08**	**74.92**

(E) ADMINISTRATIVE FUNCTIONS:

(i) The CCAs are performing DDO functions for WMO and TERM Cells, the field offices of DOT. Apart from carrying out other administrative functions as the Heads of the Department (HOD), the CCAs also handle court cases at field level where the Govt. of India is a party in service related matters and matters of license fee, spectrum charges, pension, absorption issues etc. The CCA offices are also conducting Pension Adalats to settle the pension related grievances.

(ii) Arbitrators are appointed by the Department in accordance with the provisions of Section 7-B of Indian Telegraph Act, 1885 to determine a dispute that arises between the Telegraph Authority and user of the facility. On an average, close to 300 arbitrators are appointed every year by the Department. Recently, the Department has delegated its power to appoint arbitrators under section 7-B of Indian Telegraph Act, 1885, for billing related disputes in respect of BSNL & MTNL, to the Principal Controllers/Controllers of Communications Accounts. This has been done to increase the accessibility for the consumers and to expedite the process of grievance redressal.



(iii) DOT being the owner of huge amount of assets in the form of land & building has embarked on the process of preparing an asset register of land & building. CCA offices have carried out verification of the DOT/BSNL/MTNL land with the BSNL/MTNL officers. The Maintenance of the asset register/transfer of land to BSNL is to be carried out by CCAs. DOT land & building asset register has been prepared in DOT asset website developed by National Informatics Centre. The GIS mapping of the land & building assets has been completed by NIC.

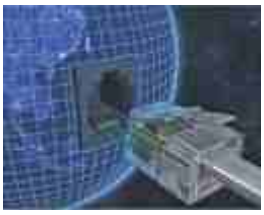
(F) NATIONAL INSTITUTE OF COMMUNICATION FINANCE

National Institute of Communication Finance (NICF) caters to the training needs of Indian P&T Accounts & Finance Service Officers (IP&TAFS) posted in Department of Telecom and Department of Posts. NICF also serves as a nodal Training and Research centre for Telecom Policies, Planning & licensing, USO regulation, Postal Accounts, Postal Finance.

NICF conducts induction training of IP&TAFS Group 'A' Probationers who are recruited through Civil Service Examination conducted by the UPSC. Induction training and in-service courses are conducted for Group 'B' officers as well. Apart from training of IP&TAFS probationers, during the year, 30 short term in-services courses have been conducted by NICF. Three batches of newly promoted AAOs have also been imparted Induction Training. Moreover, first Mid Career Training Programme of IP&TAFS Officers of 1994 Batch was initiated. Altogether 540 officers have been imparted training at NICF during the financial year 2010-11.

Shri Kapil Sibal, ,Hon'ble Minister of Communications & IT and Shri Sachin Pilot Hon'ble Minister of State for Communcations & IT with senior officers of DoT at the foundation stone laying ceremony of National Institute of Communication Finance at Ghitorni, New Delhi.

NICF has presently two campuses, one is at Ghaziabad and the other one is at Gurgaon Mehrauli Road, Ghitorni, New Delhi. Ghaziabad campus is located at ALTTC, Ghaziabad. National Institute of Communication Finance has been allotted 53 acre land at Ghitorni, Mehrauli Gurgaon Road, New Delhi for another campus to come up. Foundation Stone of this campus was laid by Hon'ble Minister of Communications & IT in the august presence of Hon'ble Minister of State for Communications & IT. This NICF centre has been mandated by the Hon'ble Minister of Communications & IT to become a specialized Training and Research Centre in the field of Communications and ultimately emerge as a benchmark for the institution around the world. The project has been included in current five year plan and planning commission has allocated funds for construction etc. of the campus.



III. 5 Vigilance Activities

Complaints are received by vigilance wing of DoT from various sources like public, Ministries, Members of Parliament, MLAs, Prime Minister's Office, Central Vigilance Commission, CBI and the field units of MTNL and BSNL. These complaints are then taken up for investigation to identify the delinquent officers/officials and to fix responsibility. During the year 2011-12 (April-December), a total of 201 complaints were received. Out of these 63 complaints were taken up for investigation. During the same period, 23 Officers/officials were charge sheeted. 104 officers/officials were punished for major/minor penalty after conclusion of disciplinary proceedings.

Staff Training

To keep the staff aware of the different activities which attract Vigilance Angle, a Training Schedule is prepared every year. Different Telecom Circles are covered every year for five days vigilance & disciplinary training course. During the year 2011-12 (April-December) 16 such courses were conducted all over the country. 297 officers at various levels were acquainted with various aspects relating to vigilance and disciplinary proceedings. These trained officers subsequently provide a pool of officers to work as Inquiry Officers, Presenting Officers and Vigilance Officers.

Vigilance Awareness Week

Vigilance Awareness Week was observed from 31st October to 5th November 2011. Essays, Quiz and Debate competitions were conducted for spreading the awareness among the staff. Prizes were given and certificates awarded to the winners.

Vigilance Clearances

This is an important activity of the vigilance wing because it is required at the time of promotion, training/deputation abroad, deputation to other organizations/Department and obtaining passports etc. During the period 4,032 officers/officials were granted vigilance clearances for various purposes.

Consultation with the Central Vigilance Commission

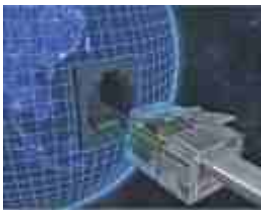
CVC is the nodal agency of the Government of India having jurisdiction over all the Ministries/ Departments/PSUs etc for vigilance related matters. Action against Government Officers/Officials are taken after following the due consultation process with the CVC. The vigilance wing of DoT coordinates with the CVC for the vigilance related matters of the Department of Telecommunications. During the current year 176 CVC complaints were received with an opening balance of 101 as on 1st April, 2011. Out of the total 277 complaints 173 were disposed of. Closing balance as on December 2011 was 104.

Anticipated achievements for January-March, 2012.

- Three vigilance Training Courses each of five days duration are proposed to be conducted.
- 1200 vigilance clearances are likely to be issued.
- Officers to be charged sheeted for Major Penalty (GOs 03) & Minor Penalty (GOs 03).
- Officers to be punished with MA/MI penalty 10.
- No of Prosecution to be issued against GOs 02.
- No of CBI reports to be refered to CVC for advice 02.
- No of appeals cases to be settled (Group A 02, & Group B 10)

Statistical Summary of vigilance Activities during 2011-12 (April-December)

	Activities	Category	Actual Number
1.	No. of complaints handled during the period		201
2.	No. of officers charge sheeted for		23
	(a) Major penalty	GOs	12
		NGOs	-
	(b) Minor penalty	GOs	11
		NGOs	-
3.	No. of officers punished with MA/ MI penalty		104
4.	No. of prosecution sanctions issued		07
		GOs	07
		NGOs	-
5.	No. of investigation reports examined and sent to CVC for advice (other than CVC cases)		22
6.	No. of CBI reports referred to CVC for advice.		11
7.	No. of officers in respect of whom Vigilance clearance issued		4,032
8.	No. of cases (received from ACU of PMO) disposed of after investigations		-
9.	No. of appeal cases settled		18
		Group 'A'	11
		Group 'B'	07



III. 6 Telecom Enforcement Resource and Monitoring (TERM)

Genesis of TERM Cells – With the increasing number of telecom service providers in the country, the Government felt the need for presence of Telegraph Authority in all the Licensed Service areas and Large Telecom districts of the country. With the growth of access service providers and ISPs, an increase in illegal/clandestine telecom operations was also observed. To tackle this, the Government has created Vigilance Telecom Monitoring (VTM) cells renamed as TERM (Telecom Enforcement, Resource & Monitoring) Cells to reflect their entire gamut of functions. As on date there are 34 TERM Cells spread across the country each headed by a Senior Administrative Grade (SAG) level officer, termed as Dy. Director General (DDG), TERM.

Functions assigned to TERM Cells:

Monitoring of compliance to prescribed norms regarding acquisition of subscribers:

In the year 2007 it was decided to have a continuous monitoring of compliance to prescribed norms regarding acquisition of subscribers for security related concerns. For this it was decided to verify the Customer Acquisition Forms (CAFs) of all the active subscribers on sample basis every month. In the year 2008 the sample size was revised to 0.1% based on the recommendation of National Sample Survey Office. Penalties are also being imposed on TSPs for non-compliance to the norms. As a result of this activity the compliance percentage of CAFs which was approx 80% have been increased to approx 95%.

Apart from above, TERM Cells are also carrying out following activities and penalties are being imposed for non-compliance:

- Analysis of subscriber databases submitted by TSPs
- Inspections of warehouses of the TSPs for having samples directly from the storage
- Investigation of subscriber verification cases reported by various sources including LEAs

More than 120 crore of rupees have been imposed as penalty in cases other than monthly CAF audit. In case of forgery pertaining to CAFs/documents more than 30,000 complaints have been lodged with local police till 31-12-11 against the culprits as per the directions of DoT.

Service Testing: As per the license agreement, all the Access Service Licensees are required to roll out their services within prescribed time periods. For this they have to offer their services in the districts selected by them for cross checking the quality/ coverage and other parameters prescribed by DoT which is termed as Service Testing. In the year 2007 it was decided that TERM Cells may be entrusted the responsibility to carry out the service testing of the cases offered by TSPs till that time as well as to register the new cases with them. These are very exhaustive testing and DoT has prescribed charges for these testing. TERM Cells are also issuing Service Test Result Certificates (STRCs) against the cases tested by them.

Till 31st Dec 2011, more than 13000 BTSs have been tested by TERM Cells which have resulted into a revenue generation of more than Rs.39 crore as testing fee.

Apart from this TERM Cells are also sending compiled data pertaining to roll out obligation for imposing Liquidated Damage (LD) Charges on the TSPs who are not complying to Roll-out obligation conditions.

Checking of compliance to EMF radiation norms: With the increasing concern over harmful effects of Electromagnetic Radiation on human health, in the year 2010 it was decided that the TERM Cells may be entrusted the work of cross checking the compliance of EMF radiation norms as prescribed by Government. In this regard specific procedures along with testing fee have also been formulated.

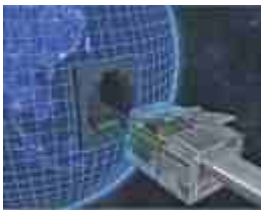
Till 31st Dec 2011, more than 13000 BTSs have been tested for compliance to radiation norms which have resulted into a revenue generation of more than Rs.13 crore as testing fee.

Launch of Mobile Number Portability (MNP): Government had decided in the year 2010 to introduce MNP across the country. For this an exhaustive testing was carried out by the TERM Cells all across the country which required synchronization of activities for porting process and maturing of calls from/ to a ported number to the numbers of all the circles/ operators. This activity was required to be done for the ported subscribers of all the operators all across the country. TERM Cells have completed this huge task within the given period of time without leaving any technical issue unresolved. The Government has prescribed the testing fee for all type of networks and till 31st Dec 2011 more than 430 networks have been tested and a revenue collection of more than Rs.13 crore is expected. The MNP acceptance testing (AT) of new networks is also being carried out by the TERM Cells as and when offered by the TSP. Though regulations regarding MNP (like permitted reasons for rejecting MNP requests, fee, time limit etc.) are being issued by TRAI but at local level TERM Cells are keeping a watch on illegal rejection of MNP requests by TSPs and also resolving the complaints received from subscribers. Subscriber complaints against more than 4400 mobile connections have been dealt by TERM Cells pertaining to MNP. In addition to this suo-motto investigations against more than 90,000 mobile connections have also been carried out till 31-12-11 based on information available from various sources.

Verification of VLR data for requirement of additional spectrum/ MSC codes by Licencees: For want of additional spectrum the licencees have to approach WPC wing of DoT along with the VLR and traffic data in support of their demand. TERM Cells have been entrusted to carry out verification of the data submitted by the TSPs with the raw data available in TSPs' exchanges and submitting the data back to WPC for taking appropriate decisions. Till 31st Dec 2011 more than 120 such cases have been verified.

TERM Cells are also carrying out verification of data submitted by TSPs for additional MSC codes. Till 31st Dec 2011 approx 70 such cases have been verified.

Handling of Public Grievance (PG) cases: TERM Cells are representing licensor in the field and complaints received through PG portal or from other sources are being analyzed and resolved by TERM Cells. Till 31st Dec 2011 complaints (other than MNP) against more than 2100 number of mobile connections have been dealt by TERM Cells



Curbing of illegal setups causing financial loss to the exchequer: One of the major purposes of creation of TERM Cells was to curb the illegal operations (not permitted under Indian Telegraph Act) and to catch hold of the culprits. Till now more than 500 such illegal setups have been unearthed and raided with the help of Law Enforcement Agencies (LEAs) i.e. local police, CBI, DRI etc. to catch hold of the culprits. These cases have been handed over to Law Enforcement Agencies (LEAs) for further actions against the culprits.

Registration of Other Service Providers (OSPs): With the growth of BPO industry in the country it was decided to decentralize the registration of Other Service Providers (OSPs) which was being done by DoT, HQ. TERM Cells were given the job of OSP registration and also the registration of Tele-marketers. The work regarding registration of Tele-marketers is now being looked after by TRAI. In view of the increasing applications for registration of OSPs, one software has been developed with the help of NIC to have a more transparent, convenient and fast mechanism to dispose-of the applications of OSP registration. The government has also prescribed a nominal processing fee of Rs. 1000/- for Tele-marketer registration and Rs. 15000/- for OSP registration. Till 31st Dec 2011 more than 14,000 Telemarketers and 3500 number of OSPs have been registered by TERM Cells which has resulted into revenue generation of more than Rs. 1.7 crore.

Inspections of TSPs/ Subscribers: TERM Cells are carrying out following type of inspections for checking compliance to the various guidelines issued by DoT, HQ from time to time

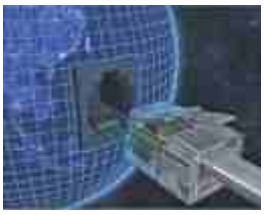
- Inspection of UASL/CMTS/Basic licensees
- Inspection of NLD/ILD licensees:
- Inspection of ISPs
- Inspection of OSPs/ Tele-marketers
- Inspection of Infrastructure Providers-1 (IP-1)
- Inspection of customers like Bulk customers, Heavy users, Internet Leased Lines, V-SAT customers etc.
- Inspection of retailers/ distributors

Till 31st Dec 2011 more than 2800 such inspections have been carried out by TERM Cells and the discrepancies have been rectified in coordination with TSPs.

Centralized Monitoring System: Government has decided to set up Centralized Monitoring System (CMS) for lawful interception and monitoring which will enable the electronic provisioning of the targets as required by Law Enforcement Agencies (LEAs) thereby reducing the manual intervention at many stages as well saving of time. The system is to be installed by C-DoT and TERM Cells have been entrusted to arrange the civil/ electrical infrastructure for the project. After commissioning of CMS, TERM Cells will be responsible for operation of CMS.

Other major works:

- Coordination among various network operators, telecomm service providers in the field and monitoring of network parameters
- Checking of compliance by the licensee of any directions issued by the licensor in public interest.
- Maintenance and update of the Subscriber Database in the respective Licensed Service Area.
- Maintenance and update of the Cell Site / BTS registers of the respective licensed service area.
- Checking of compliance of terms and conditions by the companies in respect of NOC issued by the DoT for selling of the global calling cards, international SIM Cards etc.
- Checking of compliance of terms and conditions by companies in respect of registrations issued by the DoT under OSP, IP-1, IP-II etc. category.
- To monitor inter operator connectivity to ensure optimum Call Completion Ratio (CCR) for inter operator calls.
- Matters related to national security/ Coordination with LEAs and assisting various security agencies / LEAs in providing the information related to the customers, CDRs, exchange records etc.
- Technical arrangement for the lawful interception / monitoring of all communications passing through the licensee' network as and when offered by the licensee.
- Disaster Management: Taking over of network in the event of natural calamities or the other emergency situations.
- Police verification of franchisee of TSPs in sensitive states. Till 31st Dec 2011 more than 4600 such cases have been dealt.
- Analysis of call details records/exchange records / subscription/traffic data of various licensees.
- Perform such other functions as may be entrusted to it from time to time by the DoT in overall interest of the country and consumers.



III. 7 Empowerment of Women

In accordance with the strategic approach of the Government to achieve the goals of gender mainstreaming and gender justice laid down in the National Policy for Empowerment of Women, certain steps have been taken by the Department of Telecom and the Public Sector Enterprises under its administrative control.

The Department of Telecommunications is effectively implementing the guidelines/instructions of the Supreme Court on prevention of sexual harassment of women at work place in all its units. In pursuance of the orders of the apex court, it has setup a committee on the sexual harassment of women, headed by a woman. The steps taken for empowerment of women by various functional wings of the Department are given below:

DoT-USOF's Sanchar Shakti Scheme

Recognizing the vital role that Information & Communication Technology (ICT) can play in the empowerment of the rural women, a scheme has been launched for pilot projects aimed at facilitating women's Self Help Groups (SHGs) access to ICT enabled services. The Sanchar Shakti Scheme covers the following categories of projects:

- Provision of a mobile VAS subscription to SHG with service validity/warranty of at least one year.
- Setting up of SHG run mobile repair and modem repair centres in rural areas.
- Setting up of SHG run solar based mobile/CDMA FWT charging centres in rural areas.
- The Scheme was launched on 7th March 2011 by the Hon'ble Minister of Communications & IT in the august presence of her Excellency the President of India. At present MoUs have been signed for Proof of Concept (PoC) for 9 mobile VAS projects in the states of Tamilnadu, Kerala, Maharashtra, UP, Uttarakhand, AP, Rajasthan and the UT of Punducherry. PoCs for 7 mobile VAS projects have been completed till date.

BHARAT SANCHAR NIGAM LTD. (BSNL)

BSNL employs 38,615 women at various levels. They are retained on promotion to the extent possible at the station where they are working. Wherever the spouse is also working, generally they are posted at the same station. Further, action has been taken to follow the Supreme Court guidelines on prevention of sexual harassment. To encourage and help women employees, crèches/schools/tailoring centers are being run/maintained by voluntary Telecom Women Organizations. 15% relaxation in marks is given for getting Book Award for girl students. There is a complaint committee at BSNL Corporate Office as well as Circle/SSA levels.

MAHANAGAR TELEPHONE NIGAM LTD. (MTNL)

There are 9009 women employees working at various levels in MTNL. Over 21% of total manpower is women employees.

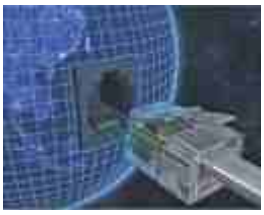
Several steps have been taken towards furthering empowerment of woman employees. A few of those are enumerated below:

- Special care is taken in case of female employee working in night shift and they are provided with rest room and dropping facility after duty hours.
- In order to redress and prohibit sexual harassment at work place Committee for prevention of Sexual Harassment has been constituted at Unit level as well as in Corporate Office.
- The service conditions are uniform and there is no gender bias.
- Crèche facility has also been provided for woman employees with infants. Maternity leave rules are on par with those in Government of India.
- Special grant is being sanctioned to Telecom Women's Central Organisation at New Delhi and for MTNL Woman Welfare Association at Mumbai, which in turn provides vocational training to kith and kin of working as well as retired or deceased employees.

ITI LIMITED

ITI Limited, being a socially conscious Public Sector Undertaking, has from its inception been committed to the concept of employees' Welfare. Due importance is given to the welfare of its women employees. There are 781 women employees as on September 30, 2011. The major facilities being provided to the women employees are as follows:

- Separate lunchrooms in Canteens, restrooms and Crèches have been provided in the units.
- The company has comprehensive health care scheme providing medical treatment/reimbursement to the employees and their families. Hospitals have been set up in Bangalore, Naini, Mankapur and Rae Bareli Plants, by the company to provide medical facilities which emphasize women and child welfare.
- In the light of the Supreme Court Judgements on sexual harassment in the work place, the Standing Orders applicable to Non-Officers and Officers has been amended in most Units to incorporate the clause on sexual harassment and during the year 2004-05, CDA rules were amended accordingly.
- Complaints Committee formed in each Unit to inquire into complaints of sexual harassment made by any women employees in the Company.
- Care is taken to ensure that women employees are nominated for training programmes, which are need based.



- It is a matter of pride to the Company that many of its women employees have been selected for the Shram Devi Awards in the past.

Telecommunications Consultants India Limited (TCIL)

TCIL is providing a friendly workplace for its female employees and safety /security measures for women are strictly enforced too and provide equal opportunities to all our women employees at par with men employees. Even some Women are holding higher management/authoritative positions in our organization. For welfare of Women, various benefit schemes are incorporated in TCIL like maternity leave has been enhanced from 90 days to 180 days for all women employees to take care of their small children.

CENTRE FOR DEVELOPMENT OF TELEMATICS (C-DOT)

Gender Sensitivity

C-DoT has always been sensitive to gender issues and consistently works towards gender equality. Presently, about 33 % of staff in C-DoT is women.

Existing Policies

All female staff members are allowed to avail up to 180 days maternity leave for delivery and up to 270 days leave subsequent to that (inclusive of 180 days maternity leave). For miscarriage/abortion, leave of a total of 45 days in the entire service is permissible.

C-DoT offers accommodation and transport benefits to all its women employees with different options that maybe availed as per individual suitability. This ensures the safety and security of all women employees in the company.

Reimbursement for residential telephone expenses is admissible to about 61 % of the women staff. Multifunctional allowance is admissible to 43 % of the women employees.

Career growth opportunities for women are available to women employees in C-DoT. In the last financial year, of the total employees promoted to higher grades, 37% of them were women. In management cadres (Team Leaders, Group Leaders, Technical Experts and Sr. Technical Experts) about 24 % are women.

In order to address issues relating to Sexual Harassment of women staff at work place, a Committee has been constituted by CDoT Board to take a fair and justified view of the cases and recommend suitable action on the same.

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III. 8 Persons with Disabilities

Department of Telecommunications appreciates the requirements of providing reservation to the physically challenged in appointments and various Government directives in this regard are duly followed by it.

The IP & TAF Service of the Department has recently acceded to the request in the light of recommendation of National Institute for the Visually Handicapped (NIVH) that the persons with Low Vision (LV) as defined in Section 2(u) of PWD Act 1995 may also be taken in the cadre.

On 7th September 2011, the Universal Service Obligation Fund held a Stakeholders Meeting on its Pilot Project Scheme for Access to ICT Enabled Services for Persons with Disabilities (PwDs) in Rural India. Under this scheme it is proposed to invite applications for three categories of pilot projects namely, dedicated ICT centers with Assistive Technologies (ATs) in rural educational, rehabilitation or vocational training centres for Persons with Disabilities, accessible public access points in villages and special handsets with/without bundled content.

Through this scheme for accessible telecommunications which is at present under formulation, USOF hopes to contribute to the economic empowerment and socio-political inclusion of PwDs. It is also hoped that with a successful demonstration of the positive impact and utility of accessible ICTs to both users and service providers, the scheme would give an impetus to the development of assistive technologies and relevant content in accessible formats and regional languages for rural PwDs. It is hoped that the success of the scheme would encourage the taking up of such initiatives on a larger scale stakeholders.

CENTRE FOR DEVELOPMENT OF TELEMATICS (C-DOT)

DoT follows guidelines issued by Government of India with respect to reservations in jobs for persons with disabilities.

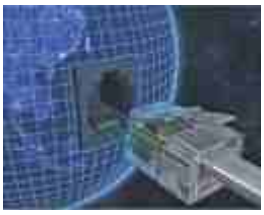
The C-DoT Campus at Delhi has been constructed in such a manner so as to ensure barrier free environment for the persons with disabilities. The main entrance/exit can be approached through a ramp together with stepped entry. Even elevators connecting the various working areas have been installed in a way to facilitate persons with disabilities to move around freely from one wing to another.

BHARAT SANCHAR NIGAM LTD. (BSNL)

There are 534 disabled persons employed in BSNL. Various facilities for persons with disabilities which are being provided by BSNL are as under:

Visually blind persons are entitled for following concessions on their telephone:

Rental rebate	-	50 % of normal rental
Advance rental	-	50 % of the normal advance rental and bi-monthly rental as applicable to normal subscriber.
Registration	-	Admissible under Non-OYT Special Category



The application for availing above concessions should be supported by a "Visually Blind Certificate" issued by the CMO/MS/Ophthalmic Surgeon of District level Government Hospital or above. The blind persons already having the facility of telephone can avail rental rebate on producing the requisite certificate and the concession will be effective from the date of change of category.

MAHANAGAR TELEPHONE NIGAM LTD. (MTNL)

Mahanagar Telephone Nigam Limited has always endeavored towards upliftment of social status of physically disable people by innovating and executing action plans falling under its realm. There are 202 persons with disabilities as on December 31, 2011.

Below mentioned steps have been taken by MTNL in fulfilling its social responsibility:-

- The provisions of reservation as per GOI Rules have been made in recruitment of officers in various streams.
- In order to provide them with livelihood, physically challenged people are allotted PCOs on priority basis and also the commission made to them is 22% as against 20% for others.
- Further, to avoid delay in allotment of PCOs mobile booths are being provided to them based on CDMA/GSM technology.

ITI LIMITED

ITI Limited, being a socially conscious Public Sector Undertaking, has from its inception been committed to the concept of employees' welfare. Due importance is given to the welfare of persons with disabilities. There are 124 physically challenged employees as on September 30, 2011. The facilities being provided to persons with disabilities are as follows:

Physically challenged employees who are residing in the township are given special allowance at the rate of 5% of the basic pay subject to maximum of Rs.75/- per month.

Those employees who are not residing in the Company's township but are utilizing Company's transport for commuting between residence and factory are given special allowance at the rate of 5% of basic pay subject to maximum of Rs.100/- per month.

Physically challenged employees are permitted 10 minutes grace time to punch in and out at the commencement and closure of the shift respectively. They are allotted quarters on "Out of Turn" basis.

As per the Government directive, ITI has been maintaining 3% (1% for OH, 1% for VH and 1% for HH) reservation for physically challenged in recruitment and the reservation in promotion has also been maintained wherever applicable.

In case of physically challenged, the company has been relaxing 10 years in age in case of recruitment for Group C and D posts and 5 years in case of Group A and B posts. In case of candidates belonging to SC/ST/OBC, among them an additional relaxation in age by 5 years for SC/ST and 3 years for OBC is given for posts in Group A and B.

The physically challenged employees are fully exempted from Professional Tax subject to production of Certificate from the Government Doctor.

The physically challenged employees need not pay any application fee for applying to any job in the Company.

Telecommunications Consultants India Limited (TCIL)

As a Central PSU, TCIL is required to comply with the constitutional provisions for ascertaining reservations in recruitments for physically handicapped persons to the extent of 3 percents. For physically handicapped, the percentage of reservation falls into three categories – visually handicapped, orthopaedically handicapped and hearing handicapped 1 % for each category. TCIL is providing a disabled friendly workplace for its employees and safety standards are strictly enforced too and organization provide equal opportunities to all disabled employees at par with other employees. Accelerated recruitment of candidates belonging to PH category is being undertaken to make up for shortfall caused largely on account of inadequate applicants and/or applicants not coming upto the required relaxed standards prescribed.

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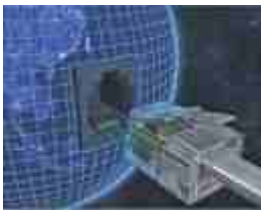


III. 9 Citizen Charter & Grievance Redressal Mechanism

OUR VISION

Evolution of a seamless networked society through Leadership, Excellence, Affordability and Diversity in telecom sector for enabling good governance.

OUR MISSION

We fulfil the vision through facilitating the Provisioning of world class telecommunications infrastructure and services making the Nation connected "anytime-anywhere" enabling rapid socio-economic development of the country.

OUR PROGRAMMES / GOALS / OBJECTIVES

The policies and programmes are guided by the basic goal of creating a world class telecom infrastructure in order to meet the requirements of IT based sector and needs of a modern economy on the least cost basis. Ensuring value for money to the consumers and easy and affordable access to basic telecom services to everyone and everywhere. The major objectives include:

- Affordable and effective communication facilities to all citizens.
- Provision of universal service to all uncovered rural and remote areas.
- Building a modern and efficient telecommunications infrastructure to meet the convergence of telecom, IT and the Broadcast media.
- Transformation of the telecommunications sector to a greater competitive environment with equal opportunities and level playing field for all the players.
- Strengthening R&D efforts in the country.
- Achieving efficiency and transparency in spectrum management
- Protecting the defence and security interests of the country.
- Enabling Indian telecom companies to become truly global players.

OUR CLIENTS

- Licencees operating /providing telecom services.
- Citizens/organizations seeking licenses
- Citizens seeking grant and renewal of Wireless Telegraph equipment possession licences .
- Citizens/organizations seeking spectrum /allotment of frequencies and related matters.

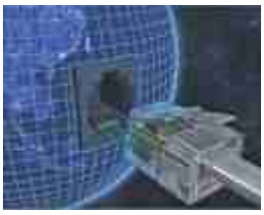
- Citizens/organisations seeking permission for tower erection for Telecom services purposes.
- Citizens with grievances relating to telecom services not redressed in the normal course by their service providers.

OUR SERVICES

Consequent upon liberalisation and restructuring of the sector, Department of Telecommunications no longer provides telecom services directly. However, Telecom Services are licensed to be operated by Indian registered companies under Section 4 of the Indian Telegraph Act, 1885. The Telecom Services are being operated both by Private Sector companies and Public Sector Undertakings viz; BSNL and MTNL. BSNL and MTNL are independent legal entities duly incorporated under Company's Act, 1956. Telecom Regulatory Authority of India established under the TRAI Act, 1997 is regularly monitoring the Quality of Service for all operators. TRAI and other PSU's like BSNL and MTNL have their own Citizen's Charter.

Telecom services have been recognized the world-over as an important tool for socio-economic development of a nation and hence telecom infrastructure is treated as a crucial factor to realize the socio-economic objectives of a country. Accordingly, Department of Telecom (DoT) is involved in:

- Formulating developmental policies for the accelerated growth of the telecommunication services in the country.
- Grant of licenses for various telecom services like Unified Access Service, Internet, VSAT service, NLD, ILD, PMRTS, Voice Mail/Audiotex/UMS, GMPLS, IPLC resale, etc.
- Registration for Infrastructure Providers (IP), Other Service Providers (OSP) and Telemarketers.
- Management of Radio Frequency Spectrum in the field of radio communication in close coordination with the international bodies.
- Enforcement of wireless regulatory measures by monitoring wireless transmission of all users in the country.
- International cooperation in matters connected with telecommunications including matters relating to all international bodies dealing with telecommunications such as International Telecommunication Union (ITU), its Radio Regulation Board (RRB), Radio Communication Sector (ITU-R), Telecommunication Standardization Sector (ITU-T), Development Sector (ITU-D), International Telecommunication Satellite Organization (INTELSAT), International Mobile Satellite Organization (INMARSAT) and Asia Pacific Telecommunication (APT).
- Promotion of standardization, research and development in telecommunications.
- Promotion of private investment in Telecommunications.



- Financial assistance for the furtherance of research and study in telecommunications technology and for building up adequately trained manpower for telecom programme, including-

  a. Assistance to institutions, scientific institutions and universities for advanced scientific study and research; and

  b. Grant of scholarships to students in educational institutions and other forms of financial aid to individuals including those going abroad for studies in the field of telecommunications.

- Administration of laws with respect to any of the matters specified in following list, namely:-

  a. The Indian Telegraph Act, 1885 (13 of 1885);

  b. The Indian Wireless Telegraphy Act, 1933 (17 of 1933); and

  c. The Telecom Regulatory Authority of India Act, 1997 (24 of 1997).

- Administration of Universal Service Obligation Fund for providing access to telegraph services to people in rural and remote areas at affordable and reasonable prices.

- Mobile Number Portability Services.

OUR EXPECTATIONS FROM CLIENTS

The Department of Telecom as a Licensor of Telecom Services under Indian Telegraph Act 1885 is fully conscious of the rights of users of Telecom Services as citizens of India. Accordingly the terms and conditions of licenses stipulate certain safeguards as shown below, to protect the rights of the consumers of telecom services which Licensees are expected to abide:

- The Licensee shall ensure the Quality of Service (QoS) as prescribed by the Licensor or TRAI.

- Access Service Providers to whom the licenses have been issued are directed to provide emergency and public utility services such as police, fire, ambulance, railways/road/air – accident inquiry etc.

- It shall be the responsibility of the licensee to issue or cause to be issued bills to its subscribers for use of the service.

- Any dispute, with regard to the provision of service shall be a matter only between the aggrieved party and the licensee, who shall duly notify this to all before providing the service. And in no case the licensor shall bear any liability or responsibility in the matter. The licensee shall keep the licensor indemnified for all claims, cost, charges or damages arising out of disputes between the licensee and its subscriber(s).

1. The Department of Telecom as licensor of Telecom Services expects the citizens/clients to follow certain etiquettes for usage of mobile phones such as:

- The mobile phone user should strictly adhere to the rules/regulations/orders/instructions as issued from time to time by the Government /Authorities in Schools, Colleges, Offices etc;

- In the public places, the mobile phone should be kept in switched off mode or in vibration or silent mode, as per the instructions on the sign boards displayed by the Authorities in hospital, airoplanes, trains, buses, places of worship, cremation/burial grounds, auditorium and cinema halls etc.
- Mobile phone should not be used while driving.
- In public places the mobile user should be considerate to people sitting or standing near him/her. He/she can move away from the people so that they are not forced to listen to his/her personal/ business conversation;
- Mobile phone should not be used to capture photographs of individuals without their knowledge and consent. It should not be used to take photographs in public places-deemed-private like swimming pools, gyms etc. Privacy of persons around the user of the camera phone should be respected.
- Ring tones should be set at low level and should not be annoying to the people around.
- The mobile phone user should not send request to the television operators for scrolling their private SMSs on the screen of televisions.
- Citizens are expected not to indulge in usage of telephones/mobiles for undesirable, illegal activities.

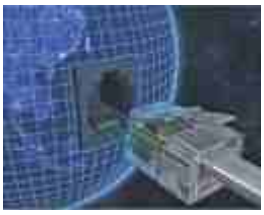
2. Citizens are expected to first seek the redressal of their grievances relating to telecom services through Three Tier Grievances Redressal Mechanism established by their service providers and they are further expected to provide a clear statement of grievance indicating the background and officials/channels previously approached for redressal.

GRIEVANCES REDRESSAL MECHANISM

All the complainants are supposed to seek redressal of their grievances at first instance through **"Three Tier Institutionalized Grievances Redressal Mechanism"** of the concerned Service Provider; [the details thereof are available at www.trai.gov.in under service provider & Consumer group section] established by them under Telecom Consumer Protection and Redressal of Grievances Regulations, 2007 (3 of 2007) issued by TRAI. The three Tiers are

- Call Centre of Service Provider concerned (Time limit: 3 days)
- Nodal Officer of Service Provider concerned and (Time limit: 10 days)
- Appellate Authority within the company of Service Provider (Time limit : 3 months)

The responsibility of redressal of grievances lies with the concerned organizations/ subordinate units/ PSUs/ administrative sections of the Ministry. However, DoT, without prejudice to the right of complainant to approach an appropriate court of law, acts as a facilitator for resolution of grievances so received.



The complainant after the lapse of above progressive time-limit may approach through following means to Public Grievance Cell of Department of Telecommunications (DoT), Sanchar Bhawan, 20, Ashoka Road, New Delhi-110 001 along with documentary evidence for non-redressal of his grievance at concerned Service Provider level:

By Post : Public Grievances Cell, Deptt. Of Telecom,Room No.518,Sanchar Bhawan,20,Ashoka Road,New Delhi 110001.

By hand : Information & Facilitation Counter,Sanchar Bhawan,20,Ashoka Road,New Delhi-110001.
By Web Portal: **www.pgportal.gov.in**

With an objective of speedy redressal, fast access and effective monitoring of grievances, DoT has implemented an integrated application system; based on Web technology (CPGRAMS) which primarily aims at submission of grievances by the Citizens from anywhere and any time (24 x 7) basis for instant and easy communication between DoT & Citizens.

The system facilitates generation of unique registration number upon the online submission of grievances from aggrieved citizens (to DoT) through internet using any Browser Interface.

The system provides the online facility to the citizen to monitor the progress of redressal process in respect of the grievance lodged by him.

INFORMATION AND FACILITATION

DoT has Information and Facilitation counter (IFC) located adjacent to Reception in front gate of Sanchar Bhawan, New Delhi-110001.

INFORMATION ABOUT RTI MATTERS

All the Public Sector Undertakings/Autonomous Bodies/Societies under the administrative control of this Department i.e BSNL, MTNL, ITI, TRAI, and TDSAT are separate "Public Authorities" in terms of Sec. 2(h) of RTI Act, 2005. They have their own websites and each of these Public Authorities has its own CPIO/APIO. For any information relating to these Authorities, application needs to be submitted to the CPIO/APIO concerned of these organisations only as per procedure detailed on their websites. The organisations concerned are expected to keep their website updated with regard to incumbency position of CPIOs and allocation of works.

Any citizen of India seeking information relating to this Department of Telecommunications may address his application to the Central Public Information Officer (CPIO) concerned in DoT. The details relating to the CPIO's with work allotted to them and their Appellate authorities, Fees payment procedures etc are available at DoT web site under the Sub menu Right to information Act. Notwithstanding the above, RTI cell of DoT does take up the matters relating to the coordination required in the RTI requests devoid of name of designated CPIO's for transferring them to the concerned Public Authority/ the custodian of the information.

HEAD OF DEPARTMENT

Secretary (Telecom),
Department of Telecommunications,
210,Sanchar Bhavan, New Delhi-110001
Tel.No. 011-23719898, Fax No. 23711514
E-mail id : secy-dot@nic.in.

CONTACT POINTS

Deputy Director General (Public Grievances),
Department of Telecommunications,
1210, Sanchar Bhawan, New Delhi-110001,
Tel.No. 011-23372131 Fax No. 23372605
E-mail id : ddgpg-dot@nic.in

Our website - www.dot.gov.in

IV. Telecom Regulatory Authority of India (TRAI)

The Telecom Regulatory Authority of India (TRAI) has always endeavored to encourage greater competition in the telecom sector together with better quality and affordable prices in order to meet the objectives of New Telecom Policy, 1999. Vide a Notification dated January 9, 2004 of the Government; Broadcasting and Cable Services also have been brought within the definition of 'telecommunication service' in terms of section 2(k) of the Telecom Regulatory Authority of India Act, 1997 as amended by the TRAI (Amendment) Act, 2000.

The mission of Telecom Regulatory Authority of India (TRAI) is to ensure that the interests of consumers are protected and at the same time to nurture conditions for growth of telecommunications, broadcasting and cable services in a manner and at a pace which will enable India to play a leading role in the emerging global information society.

ACHIEVEMENTS DURING APRIL-DECEMBER 2011

During the first nine month of the current financial year (April-December 2011), the Authority made following Recommendations to the Government on various issues of Telecommunications.

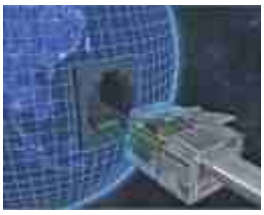
Recommendations dated 12th April 2011 on 'Telecom Equipment Manufacturing Policy':

To bring the issues relating to telecom manufacturing in India, TRAI issued a pre-consultation in May 2010. Based on the comments received and further study, a consultation paper on 'Encouraging Telecom Equipment Manufacturing in India' was issued on 28th December 2010 for obtaining views of the stakeholders. After analysis of the comments and OHDs, TRAI issued recommendations on 'Telecom Equipment Manufacturing Policy' on 12th April 2011. In these recommendations, the specific targets that seek to achieve would be:

- To meet 45% of the domestic demand through domestically manufactured products by the year 2015 and 80% by the year 2020.
- To provide market access to Indian products to the extent of 25% by the year 2015 and 50% by the year 2020.
- To increase value addition in domestic manufactured products to 35% by the year 2015 and 65% by the year 2020.

Recommendations dated 12th April 2011 on Green Telecommunications:

TRAI issued a pre-consultation paper on “Green Telecom” on 18th June, 2010 for obtaining views of the stakeholders. Based on the comments received from the stakeholders, TRAI issued consultation paper on 'Green Telecommunications' on 03.02.2011.



Based on the comments received during the consultation and its own analysis, TRAI released its recommendations on Approach towards Green telecommunications on 12th April 2011. The key recommendations are:

- Measures towards greening the sector should be part of National Telecom Policy.
- In the next 5 years – 50% of all rural towers and 33% of all urban towers to be powered by hybrid power (Renewable energy sources + Grid power)
- All equipments, products and services deployed in the sector should be energy and performance assessed and certified "Green passport" by 2015.
- All mobile phones should be free of brominates, chlorinated compounds and antimony trioxide by 2015.
- All mobile manufactures / distributors should place collection bins at appropriate places across the country for collection of e-waste – mobile phones, batteries, chargers etc.

Recommendations dated 12th April 2011 on Telecommunication Infrastructure Policy

TRAI issued a consultation paper on 'Issues related to Telecom Infrastructure Policy' on 14th January 2011. Based on the comments received from the stakeholders and its own analysis, TRAI issued the Recommendations on Telecom Infrastructure Policy on 12th April 2011.

Seminar on Next Generation Network

Considering the growing interest in NGNs, the TRAI had conducted a two days Seminar on 'Next Generation Network – Implementation & Implications' from 25th to 26th August, 2011 at New Delhi. The aim of the seminar was to provide an opportunity to explore the architecture, standards and technical aspects of NGN and provide an opportunity to examine how the migration would alter the traditional framework of quality of service, security and interconnection. In this seminar, experts from India and abroad had shared their experience with the participants during the two days of deliberations.

Consumer Education Programmes

TRAI interacts with consumer organizations/consumer advocacy groups/non-governmental organizations, through meetings and consumer education workshops. To educate the consumer advocacy groups about various initiatives taken by TRAI as well as Government and to protect the interest of consumers, TRAI has conducted during 2011-12 one regional workshop for each Zone viz., Southern, Western, Eastern, North-eastern and Northern Zones. Further, the 1st Half yearly meeting of the Consumer Advocacy Groups was held at Shimla on 27th May 2011. Moreover, the Authority has also approved holding of 231 district/block level consumer education workshops during the year 2011-12 by the Consumer Advocacy Groups(CAGs) registered with TRAI, out of which, the CAGs have organized 100 workshops so far in different parts of the country. To promote awareness amongst the consumers, a short film on "curbing of unsolicited commercial communications" has been developed by TRAI and

CDs/DVDs of the short film have been circulated to the CAGs registered with TRAI for use in the consumer education workshops being organized by them.

Amendments in 'The Telecom Commercial Communications Customer Preference Regulations'

TRAI had notified an important regulation viz., **'The Telecom Commercial Communications Customer Preference Regulations'** on 1st December 2010 to curb the menances of unsolicited commercial communications**.** Subsequently, six amendments to this regulation were issued to give effect to different provisions of the Regulations and to bring into force the Regulation with effect from 27th September 2011.

The regulations prescribe several steps for protection of customers from unsolicited Commercial calls and SMSs. Currently, Telecom service providers offer SMS packages offering as many as 2000 SMS per day, which can be made use of by unregistered persons for sending commercial communications from ordinary numbers. In order to reduce such a possibility, TRAI has, in consumer interest; prescribed a limit of 100 SMS increased to 200 SMS per day per SIM for all the customers subsequently vide 8th amendment. Concerns have been raised that such provisions will impact flow of transactional messages such as from a bank to its customers or from Airlines to its passengers, and likewise from the schools to the students/ parents. This concern is misplaced. Under the Regulation, such messages are classified as Transactional messages and the limit does not apply to the Transaction messages. It is also to be noted that the time restriction of 9 pm to 9 am does not relate to the transactional messages which can be sent at any time.

In order to address the genuine requirements of customers, TRAI has issued a Direction on 27th September 2011 exempting certain categories from the limit. These are agents of telecom service providers for sending electronic recharge messages, e-ticketing agencies, certain social networking sites and certain Directory services.

In order to further deter sending of promotional SMSs, the Authority under 7th amendment to these Regulations has prescribed 'a promotional SMS charge' of Re. 0.05 (five paisa only) payable by an Originating Access Provider to the Terminating Access Provider for each promotional SMS sent by a registered telemarketer from the network of the Originating Access Provider to the network of the Terminating Access Provider. This amendment also specifies communication of transactional message.

International Events

TRAI had organized International Workshop in collaboration with Asia Pacific Telecommunity (APT) on 'Regulatory Framework for emerging telecom environment' which was held on 6-8 September 2011 at New Delhi. The workshop was inaugurated by Hon'ble Minister for Communications & Information Technology. APT Secretary General and CMDs/ CEOs of all the major Telecom Service Providers participated in the event. There was participation of 41 international delegates and speakers from 26 countries. The total number of participants (domestic and international) was around 150.

Mr. Akitaka Saiki, Ambassador of Japan with Dr. J.S. Sarma, Chairman TRAI, during his visit on 7th April 2011.

Anticipated achievements during January-March 2012

1. Telecom Regulatory Authority of India notified the following two Regulations in the first week of January 2012.

   a) Telecom Consumer Complaint Redressal Regulations 2012

   To improve the effectiveness of complaints redressal for the telecom consumer by the service provider, the Telecom Regulatory Authority of India issued the Telecom Consumers Complaint Redressal Regulations, 2012 on 5th January 2012. These regulations replace the earlier 'Telecom Consumers Protection and Redressal of Grievances Regulations, 2007'.

   b) Telecom Consumer Protection Regulations, 2012

In order to protect the interest of telecom consumers and particularly the prepaid consumers, TRAI issued the Telecom Consumers Protection Regulations, 2012 on 6th January 2012.

2. The following activities are anticipated to be achieved during the first Quarter of 2012:

- Review of Accounting Separation Regulation. 2004: The amended Accounting Separation Regulation (ASR) is expected to be notified.
- The Recommendation on Mobile Value Added Services (MVAS) is expected by the end of February 2012.
- Guidelines for Unified Licence
- Recommendation on 'IMT advanced Mobile Wireless Broadband Service'
- Recommendation on 'Refarmig of Spectrum'
- Recommendation on 'Allocation of Spectrum Resources for Residential and Enterprise Intra-telecommunication Requirements / Cordless Telecommunication System (CTS)
- Memorandum of Understanding between Telecom Regulatory Commission, Sri Lanka (TRCSL) and Telecom Regulatory Authority of India (TRAI).
- Workshop on 'Converged IP Network technologies' in partnership with Pusan National University, Korea and ITU Asia-Pacific Centre of Excellence to be organised from 15-17 February 2012.
- As a part of consumer education programme, another round of regional workshop for each Zone will be conducted before March 2012. The second half yearly meeting of CAGs together with the annual meeting of CAGs and Chief Executive Officers of Service Providers is schedule to be held in the month of January/ February, 2012 at Ahmedabad.

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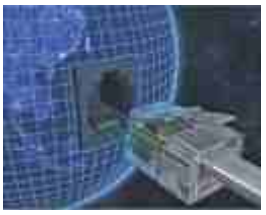
V. Telecom Disputes Settlements and Appellate Tribunal (TDSAT)

INTRODUCTION

The Telecom Regulatory Authority of India (TRAI) Act, 1997 (as amended) provides for the establishment of the TRAI and the Telecom Disputes Settlement and Appellate Tribunal (TDSAT) to regulate the telecommunication services, adjudicate disputes, dispose appeals and to protect the interests of service providers and consumers of the telecom sector, to promote and ensure orderly growth of the telecom sector and for matters connected therewith or incidental thereto. The TDSAT was created in the year 2000 by the Central Government under the TRAI Act, 1997 to settle and adjudicate disputes involving licensor and licensee, between service providers and between a group of consumers and service providers. In January, 2004 the jurisdiction of TDSAT was extended to include broadcasting and cable services besides telecommunication services. TDSAT exercises appellate jurisdiction over regulations, determinations, orders and directions of the TRAI. The jurisdiction of TDSAT is exclusive and its orders can be challenged before Hon'ble Supreme Court of India on points of law only. Statutory appeal does not lie against the interim orders of TDSAT. TDSAT is an expert body and comprises of a Chairperson and two Members. The Chairperson is a retired Judge of the Supreme Court of India while two Members are experts in the field of administration/telecommunications.

TDSAT is not bound by the provisions of Civil Procedure Code. It has formulated its own Procedure (TDSAT Procedure 2005) which is simple and is based on the principles of natural justice. Court fee for filing a petition, appeal and Misc. application before TDSAT is Rs. 5000/-, Rs. 10,000/- and Rs. 1,000/- respectively. World over the disputes in telecom and broadcasting sector are resolved by the regulator or normal courts. However, in India the unique Institution in the form of TDSAT exists for speedy settlement and adjudication of disputes on telecom and broadcasting sector. As such, dispute resolution in India is outside the purview of the telecom regulator. The number of cases in the Tribunal has been increasing every year since its establishment in May, 2000. The total number of cases filed before TDSAT in the year 2001 was 105, which increased to 491 in 2009. From 01.01.2010 to 31.12.2010, a total of 850 cases have been filed in TDSAT. In the current year i.e. from 01.01.2011 to 31.12.2011 a total of 905 cases have been filed. The disposal of cases has kept pace with the filing and all efforts are made to ensure that there is speedy disposal. This is corroborated by the fact that till 31.12.2011, 4259 cases have been disposed off out of 4832 cases instituted during that period. TDSAT, since its inception, has delivered landmark judgments in the cases of Telecom as well as Broadcasting & Cable Sectors.

TDSAT has been organizing seminars in different parts of the country to bring awareness amongst various stakeholders including consumers about the dispute redressal mechanism in the Telecom, Broadcasting and Cable Sectors and to find ways and means to strengthen the grievance redressal



system in these sectors. The Tribunal has organized seminars at Gauhati, Bhubaneshwar, Chandigarh and Ahemedabad during this financial year and also proposes to organize more seminars in different parts of the country. The distinguished speakers including Hon'ble Judges of the Supreme Court, during various seminars organized by TDSAT, have commended the delivery system of TDSAT. As sector Member of International Telecommunication Union (ITU), TDSAT has been participating in the international seminars, conferences and events organized by ITU and other international bodies.

TDSAT maintains its own website with all judgments and other activities of the Tribunal uploaded on it at www.tdsat.nic.in. TDSAT also interacts with stake holders, lawyers, consumers' etc extending advice on various issues through email at tdsat1@yahoo.co.in. TDSAT has also developed an SMS Alert System for the purpose of informing the parties to the litigation about the daily cases listed before the Tribunal.

VI. Audit Observations of C and AG

Report No. 16 of 2011-12 tabled in Parliament on 06-09-2011 (Report for the year ending March, 2010)

Department of Telecommunications

Wasteful expenditure of Rs. 16.10 crore due to non-commercialization of technology

Despite shift in worldwide market trends towards Dense Wavelength Division Multiplexing technology in 2004, C-DoT continued the execution of a project to develop the Coarse Division Multiplexing technology. As a result, an obsolete technology was developed in 2006, which had no takers rendering the entire expenditure of Rs. 16.10 crore wasteful.

Audit Report No. 3 of 2011-12, Union Government (Commercial) (Compliance Audit Observations)

Bharat Sanchar Nigam Limited

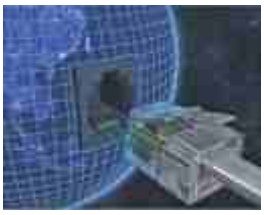
Basic Telephone Service in BSNL

In India the state owned Bharat Sanchar Nigam Limited (BSNL) is one of the major telecom service providers. Audit was conducted to assess if BSNL had taken adequate measures to sustain its Basic Telephone Service (Landline Connections). Audit findings revealed that there was lack of proper planning for utilization of the equipped capacity of exchanges though there was consistent fall in percentage of revenue earned from 82% in 2005-2006 to 61% in 2009-2010. BSNL did not adopt aggressive and dynamic tariff plans to meet the highly competitive market. Also slack marketing efforts especially in the face of competition from private operators, lack of quality in service were some major contributing factors for erosion of customer base and revenue of BSNL. Opportunity to increase subscriber base by capturing more broadband connections was also not realized. Thus erosion of subscriber base resulted in accumulation of spare exchange capacity and consequent unexploited capital investment. Audit has recommended implementation of time bound programme by BSNL for increasing its land line subscribers through aggressive marketing and also revamp its tariff plans.

Paragraph No. 5.1

Planning and Implementation of Rural Broadband in BSNL

Department of Telecommunication (DoT) implemented Broadband Policy 2004 to accelerate the growth of broadband services. DoT envisages promotion of rural telephony and accessibility of telephones in remote areas and also promotes increase in internet and broadband subscribers to 40 crore and 20 crore respectively by 2010. Audit review revealed systemic deficiencies in planning of projects, utilization of installed capacity and claim of USO subsidy in respect of Rural Broadband



resulting in blocking of capital of Rs.12.17 crore, revenue loss of Rs. 11.17 crore and loss of USO subsidy of Rs. 63.04 crore in 5 Telecom Circles out of 26. Audit recommended planning the broadband port capacity requirements in tune with the potential of the village and also devises effective marketing strategy to utilize the rural exchange optimally to earn revenue and take advantage of USO subsidy. The matter was referred to Ministry in October 2010.

Paragraph No. 5.2

Leased Circuits in Bharat Sanchar Nigam Limited:

BSNL provides leased line/circuit services as dedicated Telecommunication link to its customers on fiber optic, radio, copper wire and satellite medium or a combination of these media. Audit review was conducted to explore the efficiency in providing and billing of leased lines/ circuits in various circles of BSNL and of implementation of instructions issued by BSNL Corporate Office regarding provisioning and billing of leased circuits by the Secondary Switching Areas (SSAs). Audit findings revealed failure of SSAs to follow extant orders of BSNL Corporate Office coupled with lack of co-ordination between the executing and the billing wings of leased line services resulted in loss of potential revenue of Rs. 37.89 crore. In view of this audit recommended conducting of proper survey on feasibility of provisioning of leased circuits by BSNL compliance to the orders/instructions issued by BSNL Corporate Office from time to time and also strengthen co-ordination between operational and TRA wing.

Paragraph No. 5.3

Injudicious procurement of Global System for Mobile Communication based Fixed Wireless Phone

Audit scrutiny of the records of seven Telecom Circles revealed inadequacies in planning, procurement and utilization and marketing strategies of GSM FWPs. This resulted in excess purchase of GSM FWPs worth Rs. 30.47 crore.

Paragraph No. 5.4

Non realization of Access Deficit Charge with interest thereon:

Orissa, Punjab, Haryana and West Bengal Telecom Circles of BSNL failed to realize Access Deficit Charge (ADC) and interest from two private service providers' viz. Reliance Communication Limited (RCOM), Tata Teleservices Limited (TTL) and Tata Teleservices (Maharashtra) Limited (TTML) amounting to Rs. 63.49 crore.

Paragraph No. 5.5

Blocking of funds due to non-commissioning of Optical Fiber Routes

Lack of proper planning and coordination led to non-commissioning of 46 optical fiber routes in two Telecom Circles and two Telecom Project Circles of BSNL resulting in blocking of funds of Rs. 14.51 crore.

Paragraph No.5.6

Non-realization of compensation charges for damages to Optical Fiber Cable and Under Ground Cable by outside agencies

Failure of ten Secondary Switching Areas (four under Bihar Telecom Circle and six under Orissa Telecom Circle) to realize compensation charges for damages to cables by outside agencies resulted in non-realization of Rs. 5.93 crore.

Paragraph No. 5.7

The Status of ATNs

S. No.	Year	Report No	No of paras /PAC on Reports which ATNs have been submitted to PAC after vetting by Audit (from April-December, 31 2011)	Details of the Paras/ PAC reports on which ATNs are pending as on 31/12/2011.		
				No. of ATNs sent by the Ministry even for the first time.	No. of ATNs sent but returned with observation and Audit is awaiting their resubmission by the Ministry.	No. of ATNs which have been finally vetted by audit but have not been submitted by the Ministry to PAC
1	1996-97	6 of 1998	Nil	Nil	1	1
2	1998-99	6 of 2000	1	Nil	1	3
3	1999-00	6 of 2001	1	Nil	Nil	1
4	2000-01	6 of 2002	Nil	Nil	Nil	2
5	2002-03	2 of 2004	Nil	Nil	3	Nil
6	2003-04	2 of 2005	Nil	Nil	1	Nil
7	2004-05	9 of 2006 (NTR)	Nil	Nil	1	Nil
8	2005-06	2 of 2007 (C-DoT)	6	Nil	11	Nil
9	2006-07	CA 1 of 2008	Nil	Nil	1	Nil
10	2008-09	1 of 2008	1	Nil	Nil	Nil
11	2009-10	19 of 2010-11	Nil	Nil	3	Nil
Total			**9**	**Nil**	**22**	**7**

1. Total C&AG Audit Paras of DoT (excluding C-DoT) pending as on 31/12/2011 = 22-11=11

2. Total Paras of PAC Report pending as on 31/12/2011 = 'Nil'

VII. Centre for Development of Telematics

INTRODUCTION

C-DoT, India's premier telecommunications R&D centre, has been a pioneer and a nation builder. Committed to providing a wide range of cost-effective, indigenously developed and state-of-the-art total telecom solutions, it has come a long way since its inception 26 years ago. C-DoT's contribution to the rural telecommunications scene in the country is well known. In the eighties, C-DoT developed rural telecommunication products ideally suited to Indian conditions. Able to work without air conditioning, the C-DoT Rural Automatic Exchanges (RAXs) acquired legendary status for their ruggedness and reliability. More switching products like SBM RAX for semi-urban and MAX-L (and later MAX-XL) for urban use followed. 6RU10, a radio product for rural applications was also developed. All these products were based on contemporary digital technology.

Starting from the single mission of providing a dial tone, C-DoT has grown, over the last 26 years, to the level of a national centre for Research and Development in communication technology in many areas –Satellite communications, IN, ATM, DWDM, NMS, Wireless Broadband, GPON, NGN and Mobile Cellular systems. C-DoT's ATM technology has been mandated for use for onboard communication in Indian Navy ships. The GPON is expected to play a lead role in bringing broadband pipes to rural India. The SG-RAN product, based on sharing of active GSM infrastructure, will bring affordable mobile telephony to the rural market. The MAX-NG will breathe fresh life into the fixed line infrastructure of the country by bringing new service features to POTS (Plain Old Telephony Service) together with VoIP and broadband access to C-DoT's MAX / RAX subscribers. C-DoT has also been active in the area of providing telecom software solutions. C-DoT's umbrella NMS (Network Management System) solutions have made it possible to manage networks with elements from multiple vendors. The Data Clearing House (CLH) solution of C-DoT is commercially deployed for reconciling the roaming records between BSNL and MTNL and is holding its own against competitive pressures of the market.

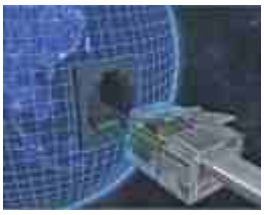
C-DoT is also entrusted with the projects of national importance, like Central Monitoring System for telecom security and Secure Network for strategic applications.

The state-of-the-art R&D facilities at C-DoT's Delhi and Bangalore campuses are comparable with the best in the world.

Achievements of First Three Quarters of the FY 2011-12

Communication and Security, Research and Monitoring

Requisite Hardware platforms and data communication links for a PSU TSP (MTNL) have been installed and are in operation. Software platform has been released for trial. Voice interception solution is ready for PSTN, GSM/ GPRS/ 3G and CDMA technologies. Testing has been completed for PSTN & GSM. Approval for implementation of a pilot of CMS in Delhi for 2 TSPs has been received in the 2nd week of



July 2011. Pilot CMC is ready. Preparedness for 2 TSPs in Delhi (MTNL and ILD-Tata Telecom) is complete and the system has been offered to the designated LEAs (IB and DRI) for conducting pilot trial. Additionally, ISF server's installation has also been completed at Ambala, in the Haryana Circle of BSNL. Process has also been initiated for pilot CMC upgradation to cater to all TSPs of Delhi, Haryana & Karnataka Circles. Further, ISF installation at 4 private TSP sites – Idea, Tata teleservices, Vodaphone and Airtel installation completed. Electronic provisioning testing initiated with second LIS vendor (M/s Varint),RMC (Regional Monitoring Centre) solution developed, tested and installed at the captive set-up for pilot roll-out of CMS.

Technology for North East

Introduction of IMS-compliant functions into the existing solution has been completed. Testing is in progress for the implementation of IMS-SSF functionality. Development work for implementation of IMS Gateway control functions is also underway.

A BBWT system has been installed at Agartala, Tripura for Proof-of-concept and is being evaluated for implementation of SWAN (State-Wide Area Network).

The Rural Technologies

Field trial of SG-RAN is in progress. In parallel, system integration and testing of a field worthy upgraded prototype is in progress.

Broadband wireless system has been installed and is operational at select Gram Panchayats in Ajmer district, Rajasthan where it is providing the last mile broadband connectivity.

Data-Rural Application Exchange (D-RAX) prototype software has been completed.

Broadband Technology

Multi-port Optical Enterprise Solution (MOES), a GPON technology, is ready and is being used to provide commercial services in the field. In parallel, validation activity has been completed for CPEs' variants and Multi-port Terminal (MT) which are being deployed in the field to upgrade the system. Transfers of Technology (ToT) agreements have been signed with 6 manufacturers.
Lab prototype of Terabit Router hardware has been made. Protocol porting completed for IPV4, and porting in-progress for MPLS and VPN.

Strategic Enterprise solution

Design & development of Secure Dedicated Communication Network (SDCN) has been completed with standard encryption. SDCN Network has been established with operationalization of softswitch, DR (Disaster Recovery) site, DSLAM (Digital Subscriber Line Access Multiplexer), ADSL lines. Secure VoIP CPE has also been developed and demonstrated for the basic functionality of secure VoIP CPE. Installation of network elements in the field is in progress. CSMP Framework's lab prototype has been completed. NMS application development utilizing CSMP platform is in progress.

Data Clearing House application is in commercial operation with BSNL and MTNL as clients.

Basic Research on Telecom Network & Enabling Technologies / Study / Pilot projects

Study projects for the futuristic technology programs, namely, LTE-A, WIPS, Unified NMS, 10G GPON, etc. have been taken up and are in progress.

Enhancements /New Feature Upgradation / Adaptation / Technical Support for the developed technologies

It is an ongoing technology support program to address various field issues, component obsolescence, upgradation etc. for the deployed systems. The progress made is as follows:

- C-DoT solution for Voice provisioning over FTTH services is operational in 132 cities. Expansion to other cities is ongoing.
- Validation & testing of MAX-NG has been completed. These systems are operational in the field at 3 sites of BSNL network and have proved field worthy. Planning for mass migration of MAX to MAX-NG systems is in progress.
- Regular on-site /and off-site technology support is being provided. Revenue collection for support services is as planned.
- C-DoT prepared and submitted the solution document comprising BOMs and Specs to ISPs (Internet Service providers) to enable them to procure the needed Hardware / Software for monitoring of their POPs / Gateway sites. ISP monitoring system has been installed at 9 new locations.

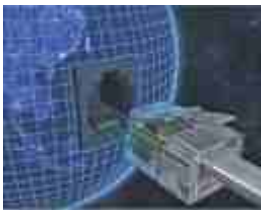
Business Promotion & IPRs

- One patent has been granted. Patents have been filed for three technologies.
- ToT agreements have been signed with manufacturers for GPON technology.
- Four NDAs have been signed for contractual relationships in respect of various technology projects, namely, LTE-A, Broadband Wireless, NMS and manufacturing of PCBs.
- A total of twenty technology promotion initiatives have been undertaken, which include Exhibitions, Demos, Visits, Pilots and Presentation etc.

EXHIBITIONS AND CONFERENCES

C-DoT held Transfer of Technology event for its optical technology – GPON (Gigabit Passive Optical Network) and technology transferred to six manufacturers for productionization

C-DoT participated in India Telecom ' 2011 exhibition held in the month of Dec., 2011 showcasing its various technologies



42nd IETE-Mid Term Symposium

Executive Director, C-DoT inaugurated the IETE Mid-Term Symposium held at Hotel Fortune Park JP Celestial, Bengaluru on 15th April, 2011. He also delivered the keynote address on "Telecom Paradigms-Indian Scenario."

C-DoT, as the Platinum sponsor of the event, put up a stall to display the latest technologies and solutions developed by it. DRAX, GPON, IP-NMS and SG-RAN were showcased during the show. The stall had many distinguished visitors from the industry and the academia, who appreciated the indigenous technology development work being carried out by C-DoT.

6th FTTH Council Asia Pacific Conference and Exhibition 2011

C-DoT participated in 6th FTTH Asia-Pacific Conference and Exhibition held at Hotel Taj Palace, New Delhi on 25-26 May, 2011. C-DoT, a member of the council, also supported the event as a Silver Sponsor. Director, C-DoT made a presentation on "Indian Demographics, Rural/Urban Divide and Impact of FTTX". C-DoT also had a stall at the exhibition where GPON and DRAX were the main attractions.

Defence and Aerospace Strategic Electronics Summit 2011 (SES 2011)

C-DoT participated in the 2nd Defence and Aerospace Strategic Electronics Summit 2011 (SES 2011) as a Lead sponsor. The event was organized by ELCINA at HAL Convention Centre, Bengaluru on 29th June, 2011.

Major technology accomplishments anticipated during Jan - March, 2012

Communication and Security, Research and Monitoring:

- RMC deployment at Nehru place, Delhi
- CMS integration for GPRS and 3G video interception with private TSP
- Training to lead LEA's namely DRI (Directorate of Revenue Intelligence) ,IB (Intelligence Bureau) , TERM (Telecom Enforcement Resource and Monitoring), Delhi, on live monitoring of C-DoT CMS system
- Major equipment procurement activity shall be completed for the installation of 3 cirlces at Haryana, Chennai, and 4-TSPs of Delhi.

Technology for North East

- Next generation VoIP solution compliant to IMS feature-set expected to be completed
- It is planned to explore north-eastern states for piloting some of the new technologies developed

The Rural Technologies

- SG-RAN Field trial completion at Ernakulam 1800 MHz. and 900 Mhz. systems.
- Further, pilot deployments of Broadband wireless system are envisaged in various parts of the country for providing the last mile broadband connectivity.
- DRAX (Data Rural Application Exchange), which provides front-end intelligence for selective services like e-health, e-agriculture, e-governance, etc. for rural areas, is expected to be pilot tried in sector-specific rural economy, namely, agriculture, silk market, health, e-education etc. to demonstrate its application for deployment of IT-services in these areas.

Broadband Technology

- GPON technology licensees are expected to gear-up for productionization of the technology.
- Lab proto-type terabit router IPV4/IPV6 compliant is planned to ready

Strategic Enterprise solution

- SDCN network expansion is planned followed by initiating the process of acceptance testing
- CSMP (Customized Service Management Platform) Framework is planned to be piloted with porting of IP-NMS application.

Business Promotion Activities

- C-DoT manufacturers' conference is planned in the month of January, 2012

PUBLIC SECTOR UNDERTAKINGS

VIII. 1 Bharat Sanchar Nigam Limited

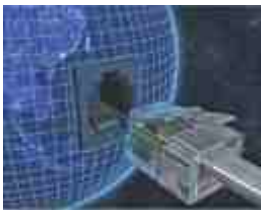
Bharat Sanchar Nigam Limited (BSNL) was formed on 1st October 2000 by corporatisation of the erstwhile Department of Telecom Operations and Department of Telecom Services. The company has taken over the erstwhile functions of the Department of Telecom in respect of provision of telecom services across the length and breadth of the country excluding Delhi and Mumbai. BSNL has a large base of skilled work force of around 2.71 lakh as on 31/12/2011 and is a 100% Govt. of India owned Public Sector Undertaking.

BSNL is a technology-oriented company and provides all types of telecom services namely telephone services on landline, WLL and GSM mobile, Broadband, Internet, leased circuits and long distance telecom Service.

The company has also been in the forefront of technology with 100% digital new technology switching network. BSNL's nation-wide telecom network covers all District headquarters, Sub-Divisional headquarters, Tehsil headquarters and almost all the Block Headquarters.

HIGHLIGHTS of 2011-12

- BSNL had 1197.66 lakh Customers as on 31.12.2011. During 2011-12 (up to 31.12.2011), it has added 27.07 lakh customers.
- As on 31.03.2011, BSNL had 37,963 wired line telephone exchanges with equipped capacity 444.80 lakh lines and customers base 252.25 lakh. The wired line status as on 31.12.2011 is 37,653 telephone exchanges with equipped capacity of 431.24 lakh lines and 230.04 lakh connections.
- BSNL had 862.69 lakh GSM Mobile connections as on 31.03.2011. During 2011-12 (up to 31.12.2011), it has added 61.59 lakh GSM Mobile connections raising the GSM Mobile customer base to 924.28 lakh as on 31.12.2011.
- There were 55.65 lakh WLL connections as on 31.03.2011. The number of connections declined to 43.34 lakh as on 31.12.2011.
- BSNL provides high speed Broadband (DSL) services and has 74.91 Lakh Broadband connections as on 31.03.2011. During 2011-12 (up to 31.12.2011), it has added 10.81 lakh broadband connections raising the broadband connections to 85.72 Lakh as on 31.12.2011.
- BSNL is an Internet Service Provider (ISP) and provides a full range of Internet services for which it has established National Internet Backbone (NIB). As on 31.03.2011, BSNL had provided 36.78 lakh Internet connections. The number of internet connections declined 35.76 lakh as on 31.12.2011.



- The total number of rural telephones as on 31.03.2011 was 414.14 lakh (i.e. about 35.38% of total telephones). During 2011-12 (upto 31.12.2011), it has added 1.86 lakh rural telephones. As on 31.12.2011, there were 416.32 lakh rural telephones of BSNL (i.e. about 34.73 % of total telephones).
- BSNL provided Village Public Telephones (VPTs) in 5.75 lakh villages, up to 31.03.2011, out of 5.94 lakh villages in the country as per census 2001. During 2011-12, it has covered 797 more villages up to 31.12.2011.

FINANCIAL PERFORMANCE

The assets and liabilities of the erstwhile DTS/ DTO stand transferred to Bharat Sanchar Nigam Limited w.e.f. 1st October 2000. The assets (fixed assets, CWIP, Debtors and Inventory etc.) taken over by BSNL as on 1st October, 2000 were valued at Rs. 63,366 crore in lieu of the capital structure which consists of equity of Rs. 5,000 crore, Rs. 7,500 crore Preference equity, Rs. 7,500 crore Government loan, Rs. 3,056 crore loan from MTNL and surplus of Rs. 40,310 crore as capital reserve. BSNL earned total revenue of Rs. 29,688 crore in the financial year 2010-11. Due to intense competition and sharp decline in ARPU the company had registered a loss of Rs. 6,384 crore. The Net Worth of the company at the end of the year 2010-11 was Rs. 80,069 crore.

Achievements during 2011-12:

S. No.	Parameter	Unit	Target for the year 2011-12	Achievement (upto 31.12.2011)
1.	Mobile Connections	Lakh Nos.	200.00	61.59
2.	Broadband Connections	Lakh Nos.	75.00	10.91
3.	Wireline + WLL Connection	Lakh Nos.	0	-34.52

Note:- From 01.04.2011 onwards all 2G Customers have been offered 3G facility.

INTELLIGENT NETWORK:

- With the commissioning of 5 new technology IN Platforms (4 General-Purpose and 1 Mass Calling), IN Services are available throughout the country. Various IN services being offered by BSNL are ITC & Call Now (Prepaid Calling Cards), ACC (Account Card Calling), FPH (Free Phone), UAN (Universal Access Number), PRC (Premium Rate Calling), Voice VPN (Virtual Private Network), UPN (Universal Personal Number) & Tele-voting & Fixed line Pre-Paid (FLPP) Service.
- Tele-voting service is provided by BSNL's Mass Calling IN platform at Hyderabad to programs such as 'Indian Idol', “Kaun Banega crorepati” (KBC)”, “Sa re gama” etc.

- Fixed Line Pre-Paid (FLPP) telephony service for PCOs is available.
- Fixed line Pre-paid over Post- paid service is available on telephone connections.
- Combined Voice VPN including BSNL landline, BSNL CellOne & MTNL landline is available.
- BSNL has signed an interoperability agreement for making available BSNL's Toll and UAN service through network of almost all the private operators.
- Online sale of Pre-paid cards of IN services is available.

Computerization & Information Technology:-

CDR Project Status

CDR based convergent billing and customer care system is replacing all the existing systems of Commercial, TRA (Telecom Revenue Accounting), FRS (Fault Repair Service) and DQ (Directory Enquiry) in respect of Landline / Broadband.

The CDR Project has Centralized Billing and Accounting System, CRM, Web based capabilities for Self Care by customers, Revenue Assurance and Fraud Management System (FMS), Provisioning in various technology switches, Inventory, Directory Enquiry, Enterprise Reporting etc. for BSNL. Zonal high end IVRS system co-terminus with Data Centres are also part of CDR Project for various customer related applications/services like Call Centres.

277 SSAs out of total 334 SSAs had been migrated to CDR System as on 31.03.2011. CDR rollout is under progress in remaining SSAs.

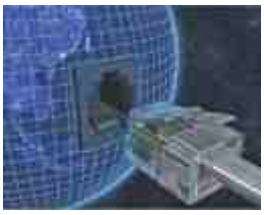
Setting up of IDC

BSNL has entered into an agreement to set up and operate Internet Data Centres (IDCs) in partnership with the Data Centre Service Providers (DCSP) on revenue share basis, wherein all CAPEX on Hardware, Software and Data Centre environmental work including air-conditioning be borne by the bidder in the BSNL provided covered space. BSNL shall only provide EA set & Electrical power to DCSP.

BSNL has awarded work for setting up Internet Data Centre (IDC) on revenue share basis for offering IT Services to customers. Such 10 Data Centres are planned to be set up in various cities.

Call Center for PSTN (Landline and Broadband)

To bring in standardization and streamlining the call center for PSTN (Landline and Broadband), BSNL CO has floated tender for setting up of call center for wireline including broadband and associated VAS. CET evaluated Techno-commercial bids and submitted its report for approval.



Zonal Bill Printing

Tender for Zonal Bill printing has been finalized and APO/PO has been placed. Print facilities to be set up in all the four zones at New Delhi, Kolkata, Chennai and Pune.

Milestones for 2011-12

- Work relating to migration to CDR platform to be completed in the remaining 25 SSAs.
- Setting up of Internet Data Centers (IDCs) on revenue share basis to be completed at 6 locations of different Circles / Metro Districts.
- Contact Center Services for Wire-line Service including Broadband and associated VAS to be operationalized in various circles.
- Centralized Bill Printing facilities to be operationalized in all the four zones at New Delhi, Kolkata, Chennai and Pune.

RURAL TELEPHONY:

Village Public Telephones [VPTs] : -

- BSNL has covered 5, 76,463 villages as per census 2001 with VPT facility in the country up to 31.12.2011 out of the 5, 93,601 inhabited villages.
- BSNL has entered into agreement with USOF, DoT for provision of VPTs in 62,302 (Revised) undisputed, undisturbed, accessible and inhabited villages having population more than 100 as per Census 1991 in the country. Out of 62,302 Villages awarded to BSNL as per USO tender, 62,046 VPTs have been provided upto 31.12.2011. Total 2 VPTs have been provided during 2011-12 (up to December '2011). Remaining VPTs are likely to be provided by February 2012.
- BSNL has entered into an agreement with USOF, DoT for provisioning of VPT facility in 62,443 newly identified uncovered Inhabited villages of Census 2001. Out of awarded 62,443 villages, BSNL has covered 48,748 villages with VPT facility till September' 2011. Total 824 VPTs have been provided during 2011-12 (up to December, 2011). Remaining VPTs are likely to be provided by May, 2012.

Replacement of MARR VPTs: -

BSNL had signed agreement with USOF, DoT for replacement of 185,121 number (revised from earlier allotted 1,86,872) of VPTs which were earlier working on Multi Access Radio Relay (MARR) technology. A total number of 184,775 MARR VPTs have been replaced upto 31.12.2011) Total 105 MARR have been replaced during 2011-12 (up to Dec. 2011). Remaining MARRs are likely to be replaced by February '2012.

TELECOM FACTORIES

BSNL Telecom factories located at Kolkata, Gopalpur, Kharagpur, Jabalpur, Bhilai, Richhai and Mumbai are in-house manufacturing units of the company. TF Mumbai is ISO 14000: 2004 & 18001:2007 OHSAS certified and all other factories are ISO 9001:2008 certified. Presently, these factories are engaged in production of SIM Card, PLB HDPE Telecom Duct, Transient Safety Device, LJU cum splitter, OFC Accessories, FDMS, SS Drop wire, Jointing Kits, DDF, Towers & other conventional items such as Mini Pillar, CD Cabinet, CT Box, DP Box, LJU etc. In the ever-changing Telecom scenario, it is the endeavor of the Telecom Factories to venture into new technology areas and support BSNL as manufacturing cum service support organization.

Amidst all constraints posed by declining demand of Towers and other conventional products, decreasing work force and inter operators competitive environment, factories have supplied Telecom goods worth Rs. 115.74 crore including 115 crore SIM Cards during first nine months of the current financial year.

INTERNATIONAL RELATIONS

Achievements during 2011-12 (up to December 2011)

A total of **23** BSNL officers were deputed abroad during the period April'2011 –December 2011 for various events with details as under:

2 officers were deputed for different technological training programs in order to upgrade the knowledge and skill of officers working in BSNL.

9 officers were deputed for attending exhibitions / meetings / conferences / business visits to have first hand information on latest developments taking place in telecommunications.

9 officers were deputed as trainers for delivery of international training on different courses under CTO PDT Training programme.

Three officers were nominated for ITU ASP Centre of Excellence online training course on “Spectrum Management and Pricing Mechanism” from 12 September to 20 October 2011.

Training

BSNL has 38 Telecom Training Centres countrywide comprising of three Apex level Training Centres namely:

- Advanced Level Telecom Training Centres (ALTTC), Ghaziabad
- Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training (BRBRAITT), Jabalpur
- National Academy of Telecom Finance & Management (NATFM) Hyderabad and

In addition there are 15 RTTCs and 20 CTTCs / DTTCs spread all over the country to cater the training needs of its employees across the country in the field of Telecommunication, IT and Management.

During the current year (April 2011 to December 2011) 50,046 No. of personnel have been imparted training

Various technological initiatives like e-learning, Digital Library, Virtual Class room, centralized data management etc have been taken by BSNL in order to have effective dissemination of knowledge and information among BSNL staff.

Prof V.N Rajasekharan Pillai, Vice-Chancellor, IGNOU signing MOU with Shri RK Upadhayay, CMD BSNL, to support Education and Training in India on 27th July2011.

DEVELOPMENT OF TELECOMMUNICATION FACILITIES IN SELECTED AREAS

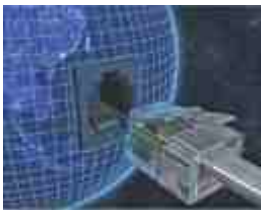
Special Component Plans: Annual Plan of BSNL pays special emphasis on accelerated growth of telecommunication facilities under Special Component Plans in (1) North Eastern Region and (2) Tribal Sub-plan in Tribal Areas.

Network Status of NE Region States:- The status of telecom facilities as on 31.12.2011 in each of the state of North East Region is shown in the following table:-

Sl. No.	Name of State	Telephone Exchange	Total Capacity (lines)	Total DELs (Nos.)	Waiting List (Wire line)	VPTs (As per census 2001)
1	Assam	597	613248	229173	12	24, 326
2	NE-1					
(2a)	Meghalaya	111	77,044	40756	24	4,943
(2b)	Mizoram	105	72,400	47,037	97	704
(2c)	Tripura	135	105328	54549	285	858
	Total	**351**	**254772**	**142342**	**406**	**6,505**
3	NE-2					
(3a)	Arunachal Pradesh	107	87,768	37077	0	2,595
(3b)	Manipur	52	55,196	27863	0	2,170
(3C)	Nagaland	62	61,036	45775	0	1,262
	Total	**221**	**2,04,000**	**110715**	**0**	**6,027**
4	Sikkim	47	44,592	13445	0	427
	NE Region	**1,216**	**11,16,612**	**495,675**	**418**	**37,285**

Development Status:- Target and achievement during the year 2011-12 for the North East Region are as follows:-

Item	2011-12	
	Target (As per MOU)	Achievements Upto 31.12.2011
Net Switching Capacity (Lines) (Wired +WLL+CMTS)	1,77,752	1,95,908
DELs (Nos.)		
(i) Fixed	41,581	- 39237
(ii) Mobile	4,58,435	2,35,145
VPTs (Nos.) as per census 2001	2,331	353
Broadband Capacity (ports)	11,020	2,252
Broadband Connections (Nos.)	58,412	16,676



Tele-density: Status of telephone connections in N-E Region and the tele-density State/Circle- wise as on 31.12.2011 are given in the following table:

Name of State	Telephone connection of BSNL	Teledensity due to BSNL's phones	Teledensity by All Operators	% Market share of BSNL
Assam	**1,827,575**	**5.92**	**45.85**	**12.91**
Meghalaya	239,610	9. 36	64.02	21.20
Mizoram	200,918	20.30		
Tripura	436,285	12.17		
NE-1	**876,813**	**12.28**		
Arunachal Pradesh	342,113	27.62		
Manipur	220,082	8.98		
Nagaland	337,643	14.99		
NE-2	**899,838**	**15.15**		
Sikkim	127,047	20.65	--	--
Total NE Region	**3,697,669**	**8.40**	--	--

Tribal Sub Plan:

The Tribal Sub Plan (TSP) is a part of the Annual Plan for providing telecom facilities in the tribal areas. For a balance and faster development of telecom facilities in tribal areas, these areas are treated as special focus areas. The main objectives of the Tribal Sub Plan areas are (i) to provide the telephone facility on demand in tribal areas (ii) to provide NSD facility to all exchanges in tribal areas and (iii) to provide public telephone in all tribal villages. Tribal areas fall in the States of Andaman & Nicobar, Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Madhya Pradesh, NE-I, NE-II, Orissa, Rajasthan, Tamil Nadu, Uttaranchal, U.P (East) & West Bengal**.**

Targets and achievements for the year 2011-12 under Tribal-sub-plan (TSP) are as follows:-

Sl. No.	Items	2011-12	
		Target	Achievement during 2011-12 (up to 31.12.2011)
1.	Telephone exchanges (Nos.)	-	3
2.	Switching Capacity (in lakh lines)	-	3.08
3.	DELs (in lakh Nos)	11.89	2.22
4	OFC (RKms)	4836	646

WELFARE MEASURES/ FACILITIES UNDERTAKEN BY BSNL

BSNL is running various welfare programmes for its employees and their family members. During the year 2011-12, it has allocated Rs. 10 crore for various Welfare programmes. Grants to the tune of Rs. 2.00 crore approx. have already been released.

Grants of Scholarship / Book Awards/ Incentives to the wards of BSNL employees.

Immediate financial assistance of Rs.15,000 to the family of BSNL employees who die in harness with disregard of basic pay limit.

Financial assistance of up to Rs.25,000 in case of serious illness or major surgical treatments..

Financial assistance to victims of natural calamities / communal riots / terrorist attacks to the tune of Rs. 5000/- per employee.

Organizing of Cultural functions, Drawing competition & Slogan, writing competitions.

Transport subsidy to the tune of 75 % for organization of Excursion trip.

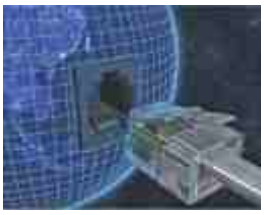
HOLIDAY HOMES

There are 38 Holiday Homes all over the country for use by its employees and their family members.

STAFF STRENGTH

Total number of working employees as on 31.12.2011

Group	Number of employees	Scheduled Caste	Scheduled Tribe	Ex-Servicemen	Women Employees
A	7284	1208	462	7	520
B	46544	7312	2081	134	7621
C	177894	32067	9112	599	23144
D	37748	8717	2107	19	7216
Industrial Worker	2227	426	215	1	114
Total	**271697**	**49730**	**13977**	**760**	**38615**



Shri Sam Pitroda, Advisor to Prime Minister of India along with Shri RK Upadhayay, CMD BSNL and Shri Sunil Kakkad, CMD, SIS at the launche of VOIP service on Broadband in New Delhi on 18th July, 2011.

Shri Raman Srivastav, DG, BSF along with Shri R. K. Bhatia, DG, ITBP joins hands with Shri R. K. Upadhyay, CMD, BSNL at the launch of special tariff plans for Paramilitary Jawans on 19th May,2011.

TABLE - 1

STATUS OF TELEPHONE EXCHANGES AND DIRECT EXCHANGE LINES

Sl.No.	Circles/States	Telephone Exchanges (Wireline)		Direct Exchange Lines (Wireline+WLL+CMTS)	
		March'11	December'11	March'11	December'11
1	ANDAMAN & NICOBAR	46	46	212,968	228,565
2	ANDHRA PRADESH	4,266	4,266	9,309,596	10,801,918
3	ASSAM	603	597	1,739,591	1,827,575
4	BIHAR	1,214	1,197	5,299,549	4,736,104
5	CHHATTISGARH	580	566	1,493,248	1,532,780
6	GUJARAT	2,999	2,983	5,692,444	5,720,266
7	HARYANA	1,335	1,301	3,666,605	3,483,599
8	HIMACHAL PRADESH	1,177	1,170	2,002,037	2,029,164
9	JAMMU & KASHMIR	369	372	1,049,531	1,198,404
10	JHARKHAND	488	488	1,863,975	1,880,396
11	KARNATAKA	2,792	2,799	7,745,753	8,549,592
12	KERALA	1,245	1,243	9,147,526	9,890,740
13	MADHYA PRADESH	2,414	2,387	4,565,716	4,098,492
14	MAHARASHTRA	4,917	4,855	9,078,525	8,176,757
15	NORTH-EAST- I	348	351	778,330	897,815
16	NORTH-EAST- II	221	221	930,414	908,656
17	ORISSA	1,174	1,158	4,392,203	4,690,444
18	PUNJAB	1,514	1,511	5,808,842	5,863,704
19	RAJASTHAN	2,307	2,276	6,873,836	6,776,915
20	TAMIL NADU	2,015	2,014	8,675,348	9,553,911
21	UTTARANCHAL	481	481	1,527,428	1,618,124
22	UTTAR PRADESH - [E]	2,185	2,173	11,439,585	11,523,810
23	UTTAR PRADESH - [W]	1,045	1,040	3,693,724	3,834,635
24	WEST BENGAL	1,380	1,380	3,858,457	3,982,790
25	KOLKATTA	524	453	3,686,891	3,361,550
26	CHENNAI	324	325	2,526,909	2,598,873
BSNL - Total		**37,963**	**37,653**	**117,059,031**	**119,765,579**

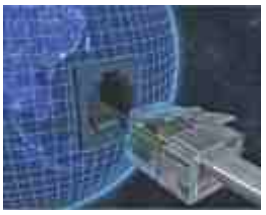


TABLE - 2

STATUS OF RURAL TELEPHONE CONNECTIONS

Sl.No.	Circles/States	2011-12 (31st March'11)			2011-12 (31st December'11)		
		Rural Phones	Total Phones	%age of Rural to Total	Rural Phones	Total Phones	%age of Rural to Total
1	ANDAMAN & NICOBAR	95,710	212,968	44.94%	100,747	228,565	44.08%
2	ANDHRA PRADESH	4,729,541	9,309,596	50.80%	5,375,666	10,801,918	49.77%
3	ASSAM	594,291	1,739,591	34.16%	619,730	1,827,575	33.91%
4	BIHAR	1,984,841	5,299,549	37.45%	1,741,550	4,736,104	36.77%
5	CHHATTISGARH	519,217	1,493,248	34.77%	531,193	1,532,780	34.66%
6	GUJARAT	1,928,246	5,692,444	33.87%	1,917,736	5,720,266	33.53%
7	HARYANA	2,201,548	3,666,605	60.04%	2,019,512	3,483,599	57.97%
8	HIMACHAL PRADESH	1,298,299	2,002,037	64.85%	1,309,034	2,029,164	64.51%
9	JAMMU & KASHMIR	157,921	1,049,531	15.05%	164,297	1,198,404	13.71%
10	JHARKHAND	558,264	1,863,975	29.95%	566,019	1,880,396	30.10%
11	KARNATAKA	1,501,143	7,745,753	19.38%	1,748,165	8,549,592	20.45%
12	KERALA	4,895,396	9,147,526	53.52%	5,070,779	9,890,740	51.27%
13	MADHYA PRADESH	1,683,146	4,565,716	36.86%	1,366,385	4,098,492	33.34%
14	MAHARASHTRA	3,230,143	9,078,525	35.58%	2,838,616	8,176,757	34.72%
15	NORTH-EAST- I	274,005	778,330	35.20%	311,743	897,815	34.72%
16	NORTH-EAST- II	358,486	930,414	38.53%	365,028	908,656	40.17%
17	ORISSA	1,911,912	4,392,203	43.53%	1,941,984	4,690,444	41.40%
18	PUNJAB	2,252,357	5,808,842	38.77%	2,260,948	5,863,704	38.56%
19	RAJASTHAN	2,372,932	6,873,836	34.52%	2,275,385	6,776,915	33.58%
20	TAMIL NADU	1,688,943	8,675,348	19.47%	1,759,439	9,553,911	18.42%
21	UTTARANCHAL	669,731	1,527,428	43.85%	704,795	1,618,124	43.56%
22	UTTAR PRADESH - [E]	3,522,688	11,439,585	30.79%	3,562,358	11,523,810	30.91%
23	UTTAR PRADESH - [W]	863,542	3,693,724	23.38%	901,266	3,834,635	23.50%
24	WEST BENGAL	2,008,275	3,858,457	52.05%	2,041,407	3,982,790	51.26%
25	KOLKATTA	0	3,686,891	0.00%	0	3,361,550	0.00%
26	CHENNAI	113,334	2,526,909	4.49%	106,550	2,598,873	4.10%
BSNL - Total		**41,413,911**	**117,059,031**	**35.38%**	**41,600,332**	**119,765,579**	**34.73%**

TABLE - 3

NUMBER OF VILLAGES WITH DIRECT ACCESS TO TELECOM FACILITIES

Sl. No.	Circles/States	No. of Villages (Rev. w.e.f.OCT.07)	As on 31st March 2011		As on 31st December'11	
			Villages covered by VPTs	%age of Villages covered	Villages covered by VPTs	%age of Villages covered
1	Andaman & Nicobar	501	343	68.46%	350	69.86%
2	Andhra Pradesh	26613	23961	90.03%	24001	90.19%
3	Assam	25124	24221	96.41%	24326	96.82%
4	Bihar	39032	38926	99.73%	38932	99.74%
5	Chhattisgarh	19744	18169	92.02%	18170	92.03%
6	Gujarat	18159	16932	93.24%	16932	93.24%
7	Haryana	6764	6678	98.73%	6678	98.73%
8	Himachal Pradesh	17495	17387	99.38%	17406	99.49%
9	Jammu & Kashmir	6417	6343	98.85%	6353	99.00%
10	Jharkhand	29354	28804	98.13%	28807	98.14%
11	Karnataka	27481	27448	99.88%	27449	99.88%
12	Kerala	1372	1372	100.00%	1372	100.00%
13	Madhya Pradesh	52117	51986	99.75%	51986	99.75%
14	Maharashtra	41442	39741	95.90%	39743	95.90%
15	North-East-I	7347	6271	85.35%	6505	88.54%
16	North-East-II	7456	5987	80.30%	6001	80.49%
17	Orissa	47529	44750	94.15%	44858	94.38%
18	Punjab	12301	12065	98.08%	12065	98.08%
19	Rajasthan	39753	38838	97.70%	38838	97.70%
20	Tamil Nadu	13837	13837	100.00%	13837	100.00%
21	Uttaranchal	15761	15364	97.48%	15365	97.49%
22	Uttar Pradesh(E)	76993	74121	96.27%	74121	96.27%
23	Uttar Pradesh(W)	20949	23629	112.79%	23629	112.79%
24	West Bengal	37365	36268	97.06%	36517	97.73%
25	Kolkata	1040	567	54.52%	567	54.52%
26	Chennai	1655	1655	100.00%	1655	100.00%
BSNL - Total		593601	575663	96.98%	576463	97.11%

VIII. 2 Mahanagar Telephone Nigam Limited

INTRODUCTION

Mahanagar Telephone Nigam Limited (MTNL) was incorporated on Feb.28, 1986 under the Company's Act 1956, as a wholly owned Govt. Company and on April, 01 1986, assumed responsibility for the control, management, operation of the telecommunications Networks in Delhi & Mumbai. MTNL is the principal provider of fixed-line telecommunication service in the two Metropolitan Cities of Delhi and Mumbai and for GSM Mobile services (four peripheral towns Noida, Gurgaon, Faridabad & Ghaziabad along with Delhi city) and the areas falling under the Mumbai Municipal Corporation, New Mumbai Corporation and Thane Municipal Corporation along with Mumbai city, also come under the jurisdiction of the company.

The authorized capital of the Company is Rs. 800 crore. The Paid up Share Capital is Rs. 630 crore divided into 63 crore share of Rs. 10 each. At present, 56.25% equity shares are held by President of India & his nominees and remaining 43.75% shares are held by FIIs, Financial Institutions, Banks, Mutual Funds and others including individual investors.

MTNL was given Navratna status in 1997 and was listed in New York Stock Exchange in 2001.

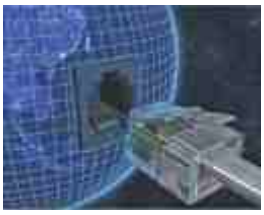
Further, MTNL is providing dial up internet services in Delhi and Mumbai under separate non-exclusive license agreement. MTNL launched Broadband service based on the state of the art ADSL2+ technology in the year 2005. MTNL is providing Triple play services i.e. voice (including VOIP), high speed internet and IPTV on this broadband network. In June 2008, MTNL was granted the ILD license for providing international long distance services. In August 2008 MTNL was granted spectrum for 3G and BWA services.

PHYSICAL PERFORMANCE

Tele Services

A variety of phone plus services have been made available by MTNL to the customers connected to modern state of art technology digital exchanges e.g. computerized morning alarm, voice mail, automatic changed number announcement, computerized fault booking/ payment system etc.

MTNL is also providing a host of value added services like Call Waiting, Call forwarding, wake up calls, absent subscriber service, caller identification, friend and family, night talk, call conference and voice mail etc. to the customers.



MTNL has taken several steps to improve its interface with the customers. MTNL has introduced improved bill collection and payment procedures (including bill payment over the Internet and via credit card), opened Tele-marts at which most subscriber services are available, introduced telephone directories on the Internet and on CD-ROM and implemented a customer service management system. MTNL's customer service management system enables staff to provide customers with access to a range of "on-line" services, including registration for new telephone lines, changes of address and issuances of bills, and allows monitoring complaints from a single point of contact. MTNL has identified high usage "commercially important persons" and is making all efforts to strengthen relationship with these subscribers. In addition to this, Telephone Adalats and Open House Sessions are being held for both way effective communications with the customers.

During 2011-12 (upto Dec 11) a total of 2.83 lakh net new connections (including fixed line, WLL, GSM & broadband) have been added by MTNL, taking the total connections to 91.52 lakh. Details of achievements during the year 2010-11 and 2012 (upto December) of Delhi and Mumbai are given in Annexure – I & II.

Fault Rate

The fault rate during 2010-11 vis-à-vis of previous years is as shown below:

Units	2007-08	2008-09	2009-10	2010-11	2011-12 Upto Dec 2011
Delhi	7.20	6.71	7.71	11.01	6.58
Mumbai	11.38	9.10	7.25	6.17	8.04

DIFFERENT SERVICES AND PROJECTS

GSM Cellular Mobile Services

2G services: To meet the growing demand of MTNL cellular service, GSM capacity in Delhi and Mumbai was planned to be further expanded by 2 crore each (including 750K line 3G). Capacity expansion has already been completed in both MTNL Delhi & Mumbai. As on date, the total GSM network capacity of MTNL is 3025K in Mumbai and 3025K in Delhi.

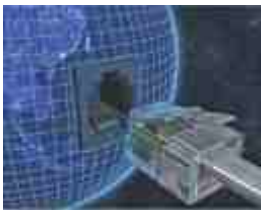
3G services: MTNL was awarded 3G spectrum in the year 2008 and has paid Rs. 6,564 crore combined for 3G spectrum for Delhi and Mumbai LSAs. MTNL has been earmarked frequencies in 2100 MHz band on 08.08.2008 for deployment of 3G services in Delhi and Mumbai and has been allotted 1 carrier of 5 MHz each in Delhi and Mumbai for the deployment. 3G services with the brand name "Jadoo" are available in entire service area of MTNL Delhi & Mumbai.

Current network status and future growth plan of 3G network in MTNL Delhi and Mumbai is as follows:

PLAN	3G Node B SITES IN MUMBAI	3G Node B SITES IN DELHI	3G CAPACITY IN EACH AREA
Present Network Status (3G)			
AS ON 31.10.2011 (3G)	673-MACRO 41-MICRO	720-MACRO- 55-MICRO-	750K- each in DELHI MUMBAI
Expansion Plan of 3G Network			
3G NODE B ON PH-II COMPLETION	720-MACRO 100-MICRO	720-MACRO 100-MICRO	750K EACH IN DELHI & MUMBAI

Folllowing steps have been taken to increase the subscriber base of 3G service:

- MTNL is in process of floating a tender for expansion of its RF network for better coverage as well as upgradation of its exiting network to support higher data rates.
- MTNL is offering the host of services to the subscribers like Video telephony, High Speed Mobile Broadband, Mobile TV, Video Streaming etc.
- To boost the demand for its 3G services, MTNL is also bundling its services with data cards & handsets from various vendors. MTNL has adopted two strategies to provide 3G data cards to its subscribers:
  a) Bundling of 3G data cards with MTNL's 3G service. In this case, MTNL allows suppliers to sell their 3G data cards bundled with MTNL's 3G services. Before allowing such data cards with MTNL's 3G services, MTNL thoroughly tests the data card for its performance in MTNL's 3G network.
  b) MTNL itself supplies the 3G data cards to its customers.
- Recently MTNL has issued purchase order of 30,000 nos. of 3G/HSDPA Data cards (15,000 nos. each for Delhi and Mumbai). The supply is likely to start in February 2012.
- In order to provide world class service/ experience to its esteemed customers, MTNL appointed M/s Qualcomm for carrying out technical audit of the 3G networks being deployed in Delhi and Mumbai. The auditing included network dimensioning evaluation and performance of 3G/WCDMA Networks of MTNL Delhi and Mumbai. The auditor was also required to clearly bring out additional requirements if any, to ensure a network of global quality. M/s Qualcomm has already completed the work and submitted the report. Based on this report, MTNL is taking steps to make the 3G network world class. MTNL is planning to upgrade the network in the latest technology feature.
- To utilize its vast fixed line and Broadband Networks for carrying the GSM traffic by way of deployment of suitable FMC (Fixed Mobile Convergence) technologies in Delhi & Mumbai, MTNL has started trial of femto cell solution in MTNL Mumbai.



MNP implementation in MTNL: MTNL launched the Mobile Number Portability in its network of Delhi and Mumbai on 20th January 2011.

Partnering Conexus Mobile Alliance: MTNL and BSNL joined prestigious Conexus Mobile Alliance of GSM Operators in Asia Pacific region. At present, a total of 11 operators are part of the Alliance from 10 countries. MTNL and BSNL had jointly hosted Conexus Working Group meetings in Delhi in June 2009. MTNL is actively participating in the alliance activities. Various customer friendly schemes like SIM replacement programme, Blackberry replacement programme, data roaming, flat rate data roaming, Conexus wide SMS etc. are new initiatives taken recently by the Alliance. The Alliance held its last quarterly meeting in Jakarta, Indonesia.

Broadband Network

Broadband services based on ADSL2+ are being provided by MTNL. Triple play services i.e. voice (including VOIP), high speed Internet and IPTV are being offered on this broadband network. The service is very popular with the subscribers. MTNL presently have a installed broadband capacity of almost 16.28 lakhs ports and its customer base has reached to 10.16 lakhs as on 31.12.2011.

During the year 2010-11 about 200K broadband access equipment have been installed. In view of the high demand, expansion of existing network by additional 170K port capacity for Mumbai is in process.

FTTH (Fiber to the Home)

MTNL is adding optical fibre in access network and planning to introduce FTTH based on GPON so as to provide customers with fibre connectivity to their homes. This will help them meet their increased bandwidth requirements for both data and video applications.

In addition to this MTNL has also allowed C-DoT to conduct a pilot project on FTTH. For this purpose C-DoT has installed its G-PON System in CGO complex and the equipment is being tested.

IP MPLS Network

A State of the Art IP/ MPLS Networks was set up by MTNL for providing High Definition TV, games data & security and world class communication infrastructure, across different games Venue during the CWG -2010 held in Delhi.

Redeployment of IP-MPLS based converged network has been completed in Delhi and is expected to be completed soon in Mumbai.This will create high IP bandwidth capacity across these cities.

Convergent Billing & CRM Project

The P.O. of Convergent Billing & CRM project was awarded to M/s BEL for Supply, installation & commissioning of Convergent Billing & CRM System on turnkey basis. The project once fully implemented will serve as a single converged platform for all billing and CRM application across all the

lines of business (LoB) of MTNL i.e. GSM, CDMA, Landline, Broad-Band, Leased Circuit as well as upcoming services. Further, AMC for three Years after three years warranty and Facility Management (Bill Printing) for Six years shall also come under the scope of the contract.

Status of implementation of the project as follows:

a. Delivery of all the Hardware & Software are over.

b. Installation of Hardware/ Software at Data Center, has been completed.

c. The following applications have been migrated / commissioned:

   i. Bill Printing Facility: Both in Delhi & Mumbai

   ii. IUC Billing: Both in Delhi & Mumbai

   iii. FRS/CSMS: at Delhi

   iv. CDMA LoB: at Delhi

   v. GSM LoB : Both in Delhi & Mumbai

   vi. Mobile No. Portability: Both in Delhi & Mumbai

Customer Premises Equipment

2,11,360 no. of ADSL 2+ CPEs of different types have been procured during the current half fiscal year (2011-12) to meet the requirements and aspirants for MTNL Broadband customers.

Lawful interception System (LIS)

A purchase order to procure the hardware for LIS for ISP has already been placed and it will be implemented with the help of C-DoT.

Centralized Wi-Fi authentication:

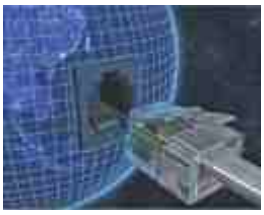
A Purchase Order has already been placed on M/s Vayam Technologies Ltd. for the solution and supplies are expected shortly.

Certifying Authority Solution

A tender for procurement of CA solution is in process.

Utilization of MTNL's Assets

MTNL has been making concerted efforts to maximize revenue by gainful utilization of its assets. MTNL has started sharing its assets such as staff quarters, office space with other Govt., semi-Govt. , autonomous organizations / bodies & public sector Banks. In this respect, MTNL has already rented out around 25,000 sq. ft. of space and rented out 40 staff quarters.



UPCOMING PROJECTS

IMS based NGN network

In order to overcome obsolescence and unserviceability of existing TDM exchange due to stoppage of support by existing vendors and to provide next generation multi media services to its customers, MTNL is contemplating implementation of an NGN, which shall preferably be based on IMS platform.

The IP Multimedia Subsystem (IMS) is a multi-service, multi-protocol, multi-access, IP-based network. This will help replace TDM switches in a phased manner. MTNL has floated a tender of NGN, which shall be based on IMS platform .IMS technology is being considered for induction in MTNL and in India for the first time.

3G Expansion

MTNL is planning to upgrade its 3G network to HSPA+. At present 3G network is HSDPA (High Speed Downlink Access) with download speeds up to 3.6 Mbps and uploads speed upto 384 Kbps. After upgradation download speed upto 21.1 Mbps and upload speed upto 5.76 Mbps will be supported by the network.

Further, MTNL is also planning to expand its radio network & BSS (2G & 3G) for providing better service experience to its esteemed customers.

In order to support higher data rates, the mobile backhaul network is also being upgraded. MTNL has planned to upgrade / replace its existing TDM Microwave links / equipments in Delhi and Mumbai to support Hybrid functionality (TDM+IP) with 100 Mbps throughput per link and purchase new Hybrid Microwave links (100 Mbps & 200 Mbps links upgradeable to 400 Mbps with or without XPIC functionality) for the upcoming new sites.

Ipv4 to IPv6 Migration:

DoT has directed all Service Providers to migrate IPv4 to IPv6 enabled network latest by Dec 2011. IPv6 migration is a challenging task as MTNL has many legacy networks and equipments for various Line of Business i.e Broadband, Wireless, Leased Circuit etc. Given these challenges, MTNL is striving hard to achieve the objective. MTNL has taken proactive steps in this direction and is already in process of replacement of it's core network (IPv4 only) with dual stack MPLS network and has also done testing for its Broadband network along with other equipments. The end to end testing for retail / enterprise IPv6 services is in advance stage.

Worldwide Interoperability for Microwave Access (Wi-Max):

Wi-MAX (Worldwide Interoperability for Microwave Access) is a telecommunications protocol that fully provides fixed mobile internet access. Wi-MAX IEEE 802.16e standard enables peak through put

of 32.13 Mbps per sector at 10Megahertz channel. MTNL has completed successful trial run of the service in Delhi and Mumbai. MTNL is planning for the roll out and marketing of its BWA services through franchisee on the revenue share model.

Femtocell Deployment

For efficient utilization of spectrum and off loading it upto certain extent (as it is a scarce national resource), MTNL plans to deploy Femto cell which is a small cellular base station specially designed for use in residential and small business environments. Femto cell connects to the service providers' network via broadband (such as DSL or Cable) such that the 3G Wireless Network traffic is carried by Broadband network.

Based on the experience gained through field trial of their femtocell solution conducted by M/s Alcatel Lucent in Mumbai network, process for procurement / deployment of femto cell solution in Delhi and Mumbai network have been initiated.

JOINT VENTURES

MTNL-STPI IT Services (MSITS):

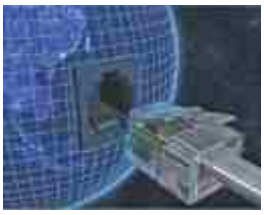
MTNL-STPI IT Services Ltd. is a 50:50 Joint Venture between Software Technology Parks of India (STPI) and MTNL. The JV formed in 2006 combines the STPI's rich experience as an ISP and MTNL's track record of being India's leading telecom operating company to offer niche portal services to the Indian community. The JV aims to provide exclusive data center services, messaging services, business application services to the identified sectors of economic activity and thereby also popularizing the .in domain in the networked community across the world.

Present Status: Keeping in view of smooth operation and expansion needs of the Data Center, MSITS created suitable infrastructure components like LT extension panel, UPS panel, PAC panel and Server DB which were installed and integrated in the live Data Center. Also MSITS is in the process of doing the caging in the Data center to support other collocation requirements.

Company has also decided to establish green data center of Tier-III standard at Delhi and Hyderabad.

United Telecom Limited (UTL)

UTL is a joint venture company of MTNL, Tata Communications Limited and TCIL along with partner Nepal Ventures (P) Limited (NVPL) . The company provides basic, Mobile, NLD, ILD and data services in Nepal. The Company is operational since 10th October, 2001 with initial offerings of WLL based basic services in Nepal. The tariff to India was costing around NRs 75/minute. UTL has brought down to the same NRs 2.59/minute. The company has set up CDMA 1X EVDO infrastructure to cater to growing data and VAS needs of its customers in Nepal. The company has also launched RUIM cards for its CDMA subscribers to have better control over fault rates. UTL network has its presence in 44 districts (out of 75 districts in Nepal) and plan to cover additional 16 districts in 2011-12.



As on date MTNL, TCIL and TCL are holding 26.68%, 26.66% and 26.66% respectively while NVPL is holding 20% of equity capital in the company. UTL has achieved the customer base of 611668. During the year ending 31st March 2011, the company reported a net profit of Rs. 7.35 crore.

Millennium Telecom Limited:

Millennium Telecom Ltd. (MTL) a wholly owned subsidiary of MTNL with registered office located in Mumbai was incorporated in February 2000. After cancellation of the Sub-marine Cable Project Tender, the Board of MTL decided to enter into new line of business and started exploring the new different business prospects viz., Infrastructure Sharing, Data Centre Outsourcing Application including Web Hosting, Cloud computing etc., Providing Turn Key Solution in response to Various Tenders in Central Govts./State Govts./PSU/Banks/ Private Corporate etc. or directly on GFR basis.

Business cases like providing Broad Band services in Wi-fi environment, leasing out spare optical fibre capacity, sharing spare CDMA Switch capacity to other operators is under process. MTL is also exploring the possibility of forming Joint Venture (JV)/Collaboration and making Telecom partners through Eols and also signing of MoUs for this purpose.

SUBSIDIARY COMPANIES

Mahanagar Telephone Mauritius Limited (MTML):

MTML, a 100% subsidiary company of MTNL, was incorporated as a private domestic company in November 2003 in Mauritius. Registered with Authorized capital of 600Millon MUR and paid up capital of 300 Million MUR at the time of inception. The Authorized capital was enhanced to MUR 1500 Million in 2009. Company got Licences from the ICTA (Telecom regulatory at Mauritius) to operate Fixed Wireless Services, Mobile Services, International Long Distance Services and Internet Services.

MTML's customer base has increased from 104,032 as on 31/3/2010 to 108,886 as on 31/03/2011. MTML has achieved a turn-over of INR 499 Million during fiscal year 2010-11. 110K capacity switch of CDMA Technology (CDMA 1x and EVDO) + 200K GSM is installed in Port Louis and island is covered through 53 towers installed as a part of radio network. 10 Customer care services all over the island and one call centre are operational to meet the customer requirements. Company is Providing Fixed, Mobile, international Long Distance and Internet services to the people of Mauritius at most competitive rates. Around $ 20 Million have been invested by MTNL in MTML. Steps are being taken for implementing international roaming for MTML Mauritius GSM network. MTML has constructed its own technical building of two floors to house its technical installations at a cost of INR 20 Million. The paid-up capital of the company is enhanced from INR 854.12 Million to INR 1052 Million.

MEETING COMPETITION

MTNL has followed aggressive marketing strategy by taking lead in product innovations and making them available at affordable price to its target customers. MTNL has been the first to launch some of the latest telecom technologies in the country like ADSL 2+ & VDSL2 in broadband, IPTV on MPEG4

technology, VOIP and 3G Mobile service, Separate Sales Units are targeting Retail and Corporate clients.

MTNL has recently launched e-CRM platform for customer care, billing and management of GSM & CDMA customers. The same is going to be implemented soon for its fixed line, Broadband and other services as well. MTNL offers multi channel access options to its customers like web, toll free helpline numbers & customer care centers, apart from distributors and retail channels.

To overcome its constrains of limited growth opportunity in Metro city of Delhi and Mumbai, MTNL has been continuously looking for organic as well inorganic growth opportunities in overseas market particularly in African region.

To continue its leadership position, in future MTNL plans to rollout WiMax, NGN based fixed service, Fixed Mobile Converged service etc. for its customers.

FINANCIAL PERFORMANCE

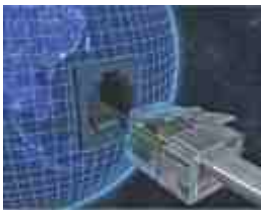
Despite stiff competition from other operators, MTNL has achieved a financial turnover of Rs 3673.95 crore during the year 2010-11, as compared to the previous year's turnover of Rs. 3656.10 crore. During the said period MTNL posted a loss of Rs. 2801.91 crore basically because of the following reasons:

- Provision of retirement benefits to the tune of Rs. 180.87 crores.
- General reduction in tariff including per second tariff plan.
- MTNL is providing services in Delhi and Mumbai only and unable to offer Pan India tariff plans unlike its competitors who have presence in other circles.
- Increase in competition from private operators
- Churn in landline.

Following steps have been taken by the Company to improve operation and to earn more revenue:

- Focus on Broadband and Enterprise business.
- New streams of revenue from sharing of resources with other service providers.
- Introduction of various schemes to attract new Landline subscribers. & sustaining existing Landline base.
- More emphasis on adding GSM and Broadband.
- Introduction of Flexible tariff policies.
- Rationalization of expenditure to reduce Administrative and Operative cost.
- Close monitoring of faults is being maintained. Emphasis has been given on the improvement of the quality of service.
- Stress has been given on the redressal of the subscriber's complaints by increasing number of positions in Customer Care Centre, providing single window at the Sanchar Haats.

However, the Q2 results of current year 2011-12 have shown loss of Rs 1714 crore.



Capital Expenditure on Technology

During the year 2010-11, MTNL has spent an amount of Rs 1257.07 crore as against Rs 1194.70 crore in the previous year on capital expenditure. This was achieved entirely through internal resource generation. Capex upto 31.12.2011 was Rs 108.79 crore.

Revenue Assurance

Outstanding amount has been consistently reduced by MTNL through vigorous efforts, ensuring prompt revenue realization. The efforts of MTNL to reduce the dues can be seen from the following table:-

(Rupees in crore)

Outstanding of MTNL in r/o Basic, GSM and CDMA as on					
31.3.2008	**31.3.2009**	**31.3.2010**	**31.3.2011**	**30.9.2011**	**30.11.2011***
1188.62	1173.73	1119.6	1103.49	1128.81	1129.17

Note:- (*In Delhi GSM and CDMA, outstanding for the month of November'2011 has been included provisionally on the basis of previous month, as Convergent Billing System is not yet stabilized & generate the requisite report).

This is accumulated outstanding dues since inception of MTNL and forms about 1.26% (approx.) of the total Amount Billed For(ABF) as on 30.09.2011.

Revenue assurance is a process which ensures that all billable activities occurring on the network are accurately captured, rated and billed. A revenue assurance program has also been implemented in MTNL wherein efforts are being made to ensure that entire revenue billed and revenue realization takes place to further reduce the outstanding dues. The above programme includes:

- Matching of commercial data and billing data.
- Matching of CDRs generated and billed.
- Issue of bills in time so that payments are received promptly.
- Introduction of various modes of payment of bills including online payment.
- Settlement of Interconnection billing.
- Appointment of Private recovery agents and re-launch of Amnesty Scheme by which certain percentage of rebate on old outstanding dues on full and final payment is allowed for recovery of old outstanding, etc.

Frequent revenue review meetings are also held at various levels of management to further reduce the old outstanding and overall revenue realization.

Further, TRAI has also mandated various telecom operators to conduct Audit of Metering and Billing System by the Auditors empanelled by TRAI itself, which supplements the revenue assurance program being implemented by MTNL.

A Convergent Billing System is under installation, which contains a significant component of Revenue Assurance. This is expected to improve revenue assurance efforts of MTNL further.

Further, to concrete the revenue assurance program, MTNL had deployed an audit firm of International Stature in Mumbai for Revenue Assurance Audit for landline interconnects billing process. In this detailed review of basic call charging analysis, end to end CDR reconciliation, errors and error handling, accuracy in service usage recording, integrity of the billing/mediation/switch database, interconnect agreement with partners is being done to further plug the leakage of the revenue.

In Delhi GSM, a credit control module has been introduced wherein if usage of any subscriber exceeds the prescribed limit, the number is automatically disconnected.

Trading of MTNL Shares

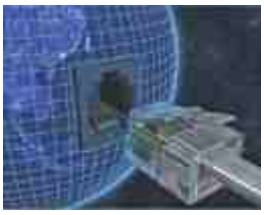
Shares of MTNL are listed with principal stock exchanges in the country such as Delhi, Calcutta, Mumbai and Chennai as well as National Stock Exchange of India. The shares are being traded regularly in the National Stock Exchange and Bombay Stock Exchange (NSE & BSE). ADRs issued by the company are listed with New York Stock Exchange (NYSE) and are regularly traded there.

Manpower

The total employees of MTNL as on 31.12.11 were 42075 belonging to different categories. Employees belonging to Scheduled Caste are 7571, which constitute 18% of the total employees. The total number of employees belonging to Scheduled Tribes is 1466, which is 3.48% of total employees.

Man Power Details

Group	Total Working Strength	SC	ST	Women	Persons With disabilities
A	1106	158	54	48	0
B	4912	598	88	609	16
C	24848	4238	472	7108	153
D	11209	2577	852	1244	33
Total	**42075**	**7571**	**1466**	**9009**	**202**



Annexure-I

Development Targets/Achievements -Delhi

S.No	Items	Achievements 2010-11	Achievements 2011-12 (Dec 11)
A	**Switching (in K lines)**		
(i)	Net Capacity Landline	0	0
(ii)	Net Capacity GSM	500000	0
(iii)	Net Capacity WLL	0	0
B	**DELs (in K)**		
(i)	Gross	453716	307284
(ii)	Net $	247832	164621
C	**Tax / Tandem (in K lines)**	0	0
D	**Transmission**		
(a)	SDH System		
(i)	STM-16	19	5
(ii)	STM-4	7	5
(iii)	ADM-1/STM-1	57	13
(iv)	**TMs-1**	5	40
E	**Optical fiber Cable (in Route Kms)**	528.39	169.454
F	**Optical fiber Cable (in Fiber Kms)**	29867.3	7360.56
G	**ISDN**	357	-138
H	**Waiting List**	0	0
I	**Broadband subscribers**	47547	37042
J	**Internet connection**	57	45
K	**IPTV subscribers**	1875	3020
L	**VOIP**	-453	-249

Annexure-II

Development Targets/Achievements -Mumbai

S.No	Items	Achievements 2010-11	Achievements 2011-12 (Dec 11)
A	**Switching (in K lines)**		
(i)	Net Capacity Landline	-47636.00	0.00
(ii)	Net Capacity GSM	500000.00	0.00
(iii)	Net Capacity WLL	0.00	0.00
B	**DELs (in K)**		
(i)	Gross	315454.00	202504
(ii)	Net $	104511.00	43975
C	**Tax /tandem (In K lines)**	1400	-32560
D	**Transmission**		
(a)	SDH System		
(i)	STM-16	10	11
(ii)	STM-4	26	9
(iii)	ADM-1/STM-1	129	94
E	**Optical fiber Cable (in Route Kms)**	377.1	331.05
F	**Optical fiber Cable (in Fiber Kms)**	25008.3	25602.62
G	**ISDN**	32	-559
H	**Waiting List**	0	0
I	**Broadband subscribers**	78940	36868
J	**Internet connection**	5190	784
K	**IPTV subscribers**	-583	147
L	**VOIP**	-645	-463

VIII. 3 ITI Limited

INTRODUCTION

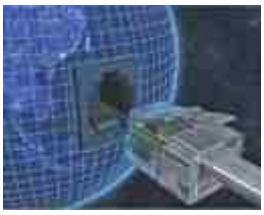
ITI Limited is India's pioneering venture in the field of telecommunications since 1948. With state-of-the-art manufacturing facilities spread across six locations and a countrywide network of marketing / service outlets, the Company offers a complete range of telecom products and total solutions covering the whole spectrum of Switching, Transmission, Access and Subscriber Premises equipment. ITI has also been giving solutions specially for secured network to Indian Army.

To improve its business, ITI has strived to look at opportunities beyond BSNL and MTNL and efforts have started bearing positive results. ITI and Registrar General of India (RGI) signed an Agreement on National Population Register (NPR) project recently. The prestigious project, under the Ministry of Home Affairs is being executed by ITI Palakkad as a consortium with BEL and ECIL. The duration of the project is about 18 months. ITI has also received an order from Ministry of Rural Development for conducting the socio-economic survey of 40 crore population. The scope of the project includes door-to-door data collection in bilingual language by using Hand Held Device, managing the data collection centers at the Tehsil level, generation of soft copy of draft and final list, uploading of the data to the NIC Server and scheduling of filed activities in consultation with the State officials for the door-to-door entry. The Palakkad Plant is executing the project and will be supported by other Plants and offices for the overall implementation of the project across the country. ITI Palakkad is also looking forward to strengthen its ties with Indian Space Research Organization (ISRO) by working on some of their projects.

In tune with the technology trend, ITI and Centre for Development of Telematics (C-DoT) signed an agreement to evaluate, discuss and negotiate contractual relationship concerning the Transfer of Technology for Gigabit Passive Optical Network (G-PON) System. The co-operation in this product line will be used for developing indigenous manufacturing of the product in ITI. ITI and C-DoT have developed wide range of landline exchanges for the national network which is a success story for both the organizations. Further, evaluations for providing solutions for Broadband at small level is taken up by both the Organisations which may be next growth driven in telecom services in India.

ITI made its entry into the power sector by winning the order of Tamil Nadu Electricity Board (TNEB) for setting up of IT infrastructure for collection of baseline energy and revenue data of the identified towns and setting up of Data Centers and customer care centre. The objective is to establish data systems, IT applications for energy accounting and auditing, IT based consumer care services along with common requirements and services for covering the entire Restructured Accelerated Power Development Reforms Program (R-APDRP) Scheme covering 110 towns across Tamil Nadu).

ITI has been one of the solutions providers to Indian Army for last more than 15 years. Strategic communications is the Company's forte with a proven record of engineering and planning of secure communication networks for India's Defence forces (ASCON). Extensive in-house R&D work is devoted



towards specialized areas of Encryption, NMS, IT and Access products to provide complete customized solutions to various customers.

ITI has also forayed into non-telecom business. Bangalore Plant is looking forward to produce and market high quality organic gas, known as "Serigas". It can be connected to standard cooking gas stove and can be used for cooking and for other thermal applications. ITI is happy to be associated in this Green Venture and hopeful that it succeeds. Pilot orders have been by MNRE for trials at consumer level. ITI has also shown interest in the Government of India's semi-conductor fabs project as the Company has resources in terms of land, infrastructure and also the manpower to undertake such projects.

As a diversification measure, other than NPR Project, SERIGAS Project, ITI is trying its best to explore new business opportunities in Defence, Banking, Solar, LED lighting, etc.

ITI has entered into agreement with Scalene Greenergy Corporation Limited, Bangalore, to produce and market high quality organic gas. Shri K.L. Dhingra, CMD, ITI Ltd. with Shri A.R. Shukla, Adviser to Union Ministry of New and Renewable Energy (MNR) and senior executives of Scalene Greenergy Corporation Limited.

The thrust areas of ITI's MoU signed recently with DoT aims at ITI coming back to profits. The Company is also required to adhere to implementation schedules of the orders bagged by it and reduce the Liquidated Damages (LD).

Secretary, DOT, Shri R. Chandrashekhar and CMD, ITI Ltd. Shri K.L.Dhingra (signing of MoU)

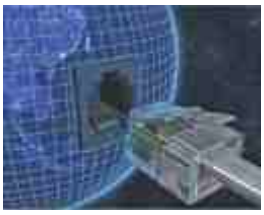
The success of technology up-gradation and induction is visible across all units of ITI, which fully conform to ISO-9001: 2000 Quality Management System and ISO 14001:2004 Environmental Management System standard also successfully implemented.

CAPITAL STRUCTURE:

The Authorised Share Capital of the Company as on 31.03.2011 was Rs.700 crore. The paid-up Share Capital as on that date was Rs.588 crore. (Rs.288 crore equity shares of Rs. 10/- each and Rs. 300 crore as preference shares of Rs. 100/- each). The percentage share of Central Government in equity as on 31.03.2011 was 92.87%.

Highlights of Performance during 2010-11 and 2011-12

The Company achieved Sales Turnover of Rs. 2139 crore during the year 2010-11 registering a decrease of 54% over the Sales Turnover of Rs.4660 crore during the year 2009-10. The company had incurred a loss of Rs.459 crore during the year 2009-10 which declined to Rs. 358 crore during the year 2010-11.



IMPORTANT ACTIVITIES / EVENTS:

National Population Registration (NPR) Project: ITI is one of the three Public Sector Undertakings short-listed by RGI (Registrar General of India) for providing Multi Purpose National ID Cards. Recently, ITI has received an order to the tune of Rs. 750 crore. from RGI for the above Project.

The Company has received an order for execution of Restructured Accelerated Power Development Reforms Program (RAPDRP) of value of Rs. 307 crore. from Tamil Nadu Electricity Board (TNEB).

ITI has bagged 6 Nos. National Safety Awards in its different Manufacturing Plants for lowest average frequency rate of accident and longest accident free period from the Ministry of Labour & Employment, National Energy Conservation Award by Mankapur Plant.

With ISO 14001:2004 Environmental Management System (EMS) Certification for Rae Bareli Plant by August 2010, the Company has gone in for ISO 14001:2004 EMS Certification of all the six Manufacturing Plants.

ITI has bagged prestigious Global Quality Award, "International Quality Summit Award" in Gold Category in a World Congress organized by Business Initiative Directives (BID) Madrid, Spain in Telecom field worldwide. This is for the first time in the history of ITI that our quality is recognized best in Telecom field.

ITI Palakkad Plant is granted AIS (Approved Inspection Scheme) status by BSNL-QA for SIM Cards, localization activities continued during the year to procure items such as cables, connectors and PCBs for GSM-BTS Project with Alcatel approval and after approval from VDC & VRC of R&D, Bangalore. CAG, VDC, VRC, Standards, Component Testing and Reliability Labs provide Qualification Approval, Standardization of Electronic components, Vendor Development and Vendor Rating after stringent evaluation in Testing in Reliability and Environmental laboratory.

The Progress of Implementation of Official Language in Corporate Office as well as in all subordinate Units / Offices is also being periodically reviewed by the OLIC Committee of Corporate Office.

ITI Limited has bagged the "Top Telecom Turnkey Company of the year 2011" award from Voice and Data, an influential Indian Communications magazine from Cyber Media.

ITI participated in the 19th Convergence India 2011 International Exhibition and Conference organized by Exhibitions India Group from March 24-26, 2011 at Pragati Maidan, New Delhi. Hon'ble Minister of State for Communications and Information Technology inaugurated the event on March 24. The theme of the event was "NextGen. Applications & Services: Empowering a Billion Lives".

FUTURE OUTLOOK:

- Next Generation Network: Next Generation Network (NGN) is a Soft Switch based Telecommunication network capable of providing services, viz. Voice, Data & Video by

encapsulating them into packets. Manufacturing of IP TAX equipment – Class IV, Trunk automatic exchange and Class V, local exchange, based on Soft Switch architecture is planned.

- Carrier Ethernet: Carrier Ethernet is the next generation transport technology for high bandwidth packet access for internet and business communication. ITI is in the process of finalizing a technology partner for this product to address anticipated tender from BSNL/MTNL & Defence.
- ITI has also entered into Agreement with C-DoT to manufacture C-DoT developed G-PoN equipments.
- Solar Power equipments for rural BTS Sites: Manufacturing of Solar Power equipments for rural BTS sites is under consideration which will help for better penetration of mobile communication into rural areas where availability of power is a major constraint. ITI has successfully demonstrated its capability in this area and is going ahead for upgrading its facility to meet demand.
- LED Lighting Products: ITI Mankapur Plant is planning to take up the manufacturing of LED Lighting products. Huge market potential is available for this product considering the benefits of very low power consumption and longer life of LED Lighting systems.
- Contract Manufacturing Activities: ITI has given renewed thrust to take up Contract Manufacturing Activities and is approaching premier Public Sector Undertakings in this regard. ITI Palakkad Plant has already tied up with VSSC, Thiruvananthapuram to manufacture PCBs to their requirement. ITI Bangalore Plant is doing work for BHEL & HAL on contract manufacturing model to enhance capacity utilization.
- Bio Gas Project: ITI Bangalore Plant is planning to take up manufacture of equipments for this project. The project is a low cost solution to source energy in the form of cooking gas or electricity from kitchen waste of bio waste.

Manpower Position:

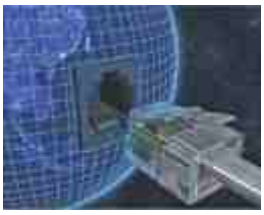
Total strength of employees of the Company at the end of the year 2010-11 was 10616 as compared to 11737 at the end of previous year. Manpower strength as on 1st September 2011 was 10105 employees.

Citizen's Charter:

ITI LIMITED is Public Sector Undertakings under the administrative control of Department of Telecommunication.

Company's website: itiltd-india.com

The Right to Information Act, 2005 has enabled all the citizens to seek information. Since introduction of the Act, a mechanism has been drawn to process all requests received by Corporate Office / Units under the Act. The Units and Regional offices have designated PIOs / APIOs with CPIO & Appellate authority at the Corporate Office.



Details of physical achievements for the year 2010-11 (April 2010 – March 2011), performance during the first nine months (April to December 2011) and anticipated achievement for January – March, for the FY 2011-12 is as under:

(Rs. in crore)

Major Products	Achievement in 2010-11	Achievement in First Nine months (April-Dec. 2011) for FY 2011-12	Anticipated achievement for January - March 2012
MANUFACTURING PRODUCTS			
OCB-283 Core incl. I&C	3.36	0	0
OCB-CSN	0.45	0	0
SSTP / IP TAX	1.77	10.06	0
C-DoT PRODUCTS & SPARES	4.38	1.03	2.89
DIVERSIFIED PRODUCTS	32.84	2.45	12.57
STMs / OPTIC FIBRE EQPTS	45.67	0.73	0
PCM MUX	14.34	3.64	0
DWDM	56.96	8.29	0
RADIO MODEM	-	17.50	0
MLLN	2.41	0	0
EPBT/ CLI PHONES	8.11	0.01	0.10
ADSL - CPE	37.47	3.98	23.96
G PON	119.98	24.90	95.00
SIM CARDS / USIM	6.09	0.28	0
MNID/NPR	11.46	194.47	408.58
SMPS	14.94	3.19	2.40
MISC. Products	16.93	54.05	19.40
DEFENCE / ASCON	54.77	33.55	27.59
TURNKEY PROJECTS			
GSM INFRA	1521.54	47.47	82.02
WLL- CDMA INFRA	14.96	0	0
SERVICES BUSINESS	170.50	100.61	319.31
TOTAL (Incl. Duty)	2138.93	506.21	993.82

VIII. 4 Telecommunications Consultants India Limited

Telecommunications Consultants India Limited (TCIL) was set-up on 10.03.1978 with the main objective to provide world class technology in all fields of telecommunications and information technology to excel in its operations in Overseas and in the domestic markets by developing proper marketing strategies, to acquire State of the Art technology on a continuing basis and maintain leadership. It also aims to diversify into Cyber Parks / Cyber Cities and upgrading legacy networks by focusing on Broadband Multimedia Convergent Service Networks, entering new areas of IT as systems integrator in Telecom billing customer care value added services; e-governance networks and Telecom fields by utilizing TCIL's expert technical manpower, Developing Telecom and IT training infrastructure in countries abroad and aggressively participating in SWAN projects in various States.

TCIL is a 100% Govt. of India owned Schedule-A Miniratna CPSE in Telecom, IT and Technical Consultancy service sector, under the administrative control of Ministry of Communications & IT, Department of Telecommunications. It's registered and corporate offices are at New Delhi.

Vision/Mission

The vision of the company is 'to excel in providing solutions in ICT, Power and Infrastructure Sectors globally by anticipating opportunities in technology.'

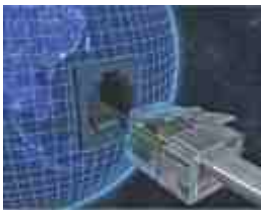
The mission of the company is 'To excel and maintain leadership in providing Communication solutions on turnkey basis in Telecommunications and Information Technology Service Sector globally and to diversify by providing excellent Infrastructure facilities particularly in the high tech areas.'

Industrial / Business Operations

TCIL is undertaking turnkey projects in all fields of Telecommunications & IT in India and abroad. The core competence of the company is in core and access network projects, Telecom Software, Switching and Transmission Systems, Cellular Services, Rural Telecommunications, Optical Fibre based Backbone Transmission System, IT and Networking solutions, E-governance, Civil and Architectural Consultancy for Cyber Cities, Telecom Complex etc. The company has also diversified into Architectural Consultancy and Civil Construction.

The company operates through its Project Offices / Units / Branches. It also has Joint Ventures namely Bharti Hexacom Ltd., United Telecom Ltd., TCIL Bellsouth Ltd. and TCIL Saudi Co. Ltd. In addition the company has 3 subsidiary companies namely Intelligent Communication System India Ltd., TCIL Oman LLC and Tamilnadu Telecommunications Ltd.

The Company has also entered into Basic and other licensed Services in India/ abroad through the JV route. TCIL has operations of GSM cellular mobile services through a JV in Rajasthan and operation of



WLL (Wireless in Local Loop) system based basic services in Nepal, through a JV with MTNL, Tata Communications and a Nepalese partner.

The Turn Over of the company during the period from 2008-09 to 2010-11 is mentioned below:-

(Rs. in crore)

Main Services / Segments	2010-11	2009-10	2008-09
Telecom	482.68	443.67	447.75
Civil	368.22	289.10	198.66
Total	850.90	732.77	646.41

Strategic Issues

The company has diversified in hi-tech areas like WLL Fiber to the home cyber park, Cyber city e-Medicine, e-Education and also in Civil construction business.

Performance Highlights

The company was able to improve its profitability due to increase in turnover and also due to improved margin in overseas projects.

The company achieved 16.12% increase in turnover and 24.49% increase in Profit before tax during the year 2010-11 over those of the previous year.
The company achieved a sale turnover of Rs. 400.35 crore and profit before tax of Rs. 158.76 crore up to December 2011.

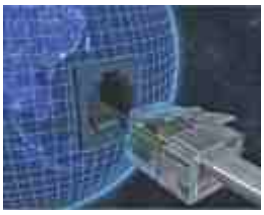
Achievements, activities and performance during the first nine months (April – December 2011)

During the year 2011-12, till December 2011, Company has secured orders of over Rs. 605.00 crores. The major orders booked during the year are as under:

- Development of lakhnadon Ghansore Road in Madhaya Pradesh on BOT basis valuing Rs. 66.57 crore.
- GSM Civil Tower Project for Rs. 10 crore. in KSA.
- OSP Work from STC for Rs. 9.6 crore. in Saudi Arabia.
- FTTH Work valuing Rs.72 crore from Mobily, KSA.
- Ericsson Manpower Supply & THALES Laying of Cable in Kingdom of Saudi Arabia valuing Rs. 2.00 crore.

- Construction of Stadium of JNV distt. Raibarelly UP – Navodaya Vidyalaya Samiti for the value of Rs.25.00 crore.
- Construction of S.C.N.U. Bhawan in 11 districts of Bihar from State Health Society for the value of Rs.5.00 crore.
- Ncell Nepal Optical Fibre project for ducting valuing Rs. 8.5 crore.
- NIB II Project 3 – Project for augmentation of capacity from 5 crore to 10 crore Subscribers for BSNL for the total value of Rs. 113.50 crore.
- PMC Services for construction & development of REC World HQ at Gurgaon (Haryana) for the value of Rs. 3.30 crore.
- Modernisation and expansion network and infrastructure project of Sierratel valuing US$ 3.02 crore.
- Civil Tower Works from Saudi Telecom Company (STC), Kingdom of Saudi Arabia for SR 1.5 crore.

(TCIL -MOU-signing) Secretary DOT, Shri R. Chandrashekhar with former CMD TCIL



Anticipated achievements for the months of January-March 2012

- The execution of hi-tech Pan Africa e- network project for tele medicine and tele-education has enhanced the company's reputation and company has successfully commissioned network in 47 countries so far and will be able to commission in one more country.
- New technologies like 3G networks, Fibre to the Home' (FTTH) networks to meet the high bandwidth requirement, Voice over Internet Telephony' (VoIP) Service, 'Internet Protocol Television' (IPTV), IVRS (Interactive Voice Response System), CSMS (Customer Support Management System) are likely to give the company new opportunities significantly in the network areas.
- Company stands lowest in a tender of Optical Fiber Network for defence in consortium with VTL. The Project value is Rs. 5700 crore. Tender is still under evaluation.
- Project in Sierra Leone valuing Rs 145 crore is expected to start in full swing during the quarter. Survey work has already been completed.

Government Directives Regarding Reservation

As a Central PSU, TCIL is required to comply with the constitutional provisions for ascertaining reservations in recruitments for scheduled castes, scheduled tribes, other backward classes and physically handicapped to the extent of 16.66%, 7.5%, 25.84% and 3% respectively. For physically handicapped, the percentage of reservation falls into three categories – visually handicapped, orthopaedically handicapped and hearing handicapped 1 % for each category. TCIL is providing a disabled friendly workplace for employees and safety standards are strictly enforced too. TCIL provides equal opportunities to all disabled employees at par with other employees. Accelerated recruitment of candidates belonging to SC,ST,OBC & PH category is being undertaken to make up for shortfall caused largely on account of inadequate applicants and/or applicants not coming upto the required relaxed standards prescribed.

Human Resources Management

The enterprise employed 845 regular employees as on 31.03.2011. The retirement age in the company is 60 years. Category wise employment status for last 3 years is given below:

Particulars	2010-11	2009-10	2008-09
Executives	373	370	376
Non Executive	472	480	475
Total Employees	845	850	851

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IX. Statistical Supplement

TABLE - 1

RELATIVE PERFORMANCE DURING MARCH'10 - DECEMBER'11

S.No.	Description		Position at the End of		Absolute Change (4-3)	Position at the End of		Absolute Change (7-6)
			March'10	March'11		March'11	December'11	
1	2		3	4	5	6	7	8
1	Phones (In Lakh)	Total	6212.80	8463.28	2250.48	8463.28	9265.48	802.20
		Wireline	369.57	347.30	-22.27	347.30	326.85	-20.45
		Wireless	5843.23	8115.98	2272.75	8115.98	8938.63	822.65
		Public	1058.71	1260.02	201.31	1260.02	1289.17	29.15
		Private	5154.09	7203.26	2049.17	7203.26	7976.31	773.05
		Rural	2007.73	2822.89	815.16	2822.89	3153.90	331.01
		Urban	4205.07	5640.39	1435.32	5640.39	6111.58	471.19
2	Teledensity	Overall	52.74%	70.89%	-	70.89%	76.86%	-
		Public	8.99%	10.55%	-	10.55%	10.69%	-
		Private	43.75%	60.34%	-	60.34%	66.17%	-
		Rural	24.31%	33.83%	-	33.83%	37.52%	-
		Urban	119.45%	156.94%	-	156.94%	167.46%	-
3	%age share of	Public	17.04%	14.89%	-	14.89%	13.91%	-
		Private	82.96%	85.11%	-	85.11%	86.09%	-
		Rural	32.32%	33.35%	-	33.35%	34.04%	-
		Urban	67.68%	66.65%	-	66.65%	65.96%	-
4	Switching Capacity (In Lakh)	Public	1242.49	1376.75	134.26	1376.75	1382.05	5.30
5	Village Public Telephones (VPTs)		565960	575663	9703	575663	576463	800
6	PCOs (In Lakh)		18.58	15.71	-2.87	15.71	13.54	-2.17
7	OFC Route kms		658548	698557	40009	698557	708052	9495
8	TAX Lines (In Lakh)		99.32	110.48	11.16	110.48	110.48	0.00

TABLE - 2

TELEPHONE PER 100 POPULATION-URBAN/RURAL (TELE-DENSITY) AS ON 31ST MARCH'11 & 31ST DECE,NER'11

Sl.No.	License area-wise	Tele-Density						Telephones						% of Rural Phones to Overall Phones	
		Overall		Urban		Rural		Overall		Urban		Rural			
		March'11	December'11	March'11	December'11	March'11	December'11	March'11	December'11	March'11	December'11	March'11	December'11	March'11	December'11
1	ANDHRA PRADESH	74.35%	79.65%	180.32%	189.71%	33.70%	37.38%	63045005	67996738	42387670	44945467	20657335	23051271	**32.77%**	**33.90%**
2	ASSAM	38.98%	45.85%	124.45%	144.72%	23.93%	28.21%	11928394	14158164	5701595	6765840	6226799	7392324	**52.20%**	**52.21%**
3	BIHAR[1]	42.32%	47.16%	171.96%	191.93%	21.86%	24.27%	54737466	61614113	30322638	34241653	24414828	27372460	**44.60%**	**44.43%**
4	GUJARAT	81.90%	87.67%	134.00%	141.57%	46.68%	50.86%	48904839	52876469	32278047	34648835	16626792	18227634	**34.00%**	**34.47%**
5	HARYANA	82.59%	85.80%	144.17%	148.09%	51.33%	53.65%	21039617	22124635	12367428	13000367	8672189	9124268	**41.22%**	**41.24%**
6	HIMACHAL PRADESH	111.11%	118.64%	440.12%	467.10%	70.23%	74.91%	7553408	8121731	3306771	3565508	4246637	4556223	**56.22%**	**56.10%**
7	JAMMU & KASHMIR	50.90%	52.52%	107.84%	115.40%	30.01%	29.27%	5970619	6218463	3395181	3688450	2575438	2530013	**43.14%**	**40.69%**
8	KARNATAKA	87.76%	94.30%	176.59%	184.11%	35.10%	40.50%	52192245	56509333	39085531	41332770	13106714	15176563	**25.11%**	**26.86%**
9	KERALA	100.01%	107.24%	236.25%	254.97%	53.25%	56.63%	34661797	37361196	20919943	22665045	13741854	14696151	**39.65%**	**39.34%**
10	MADHYA PRADESH[2]	48.88%	52.57%	120.73%	127.10%	22.92%	25.46%	47208801	51352468	30947016	33113340	16261785	18239128	**34.45%**	**35.52%**
11	MAHARASHTRA	68.97%	75.46%	112.48%	123.92%	46.07%	49.64%	64569437	71267589	36318090	40682669	28251347	30584920	**43.75%**	**42.92%**
12	NORTH-EAST[3]	56.50%	64.02%	132.57%	145.51%	32.36%	37.91%	7453972	8519625	4213729	4698404	3240243	3821221	**43.47%**	**44.85%**
13	ORISSA	56.37%	63.25%	194.98%	212.20%	28.42%	32.91%	22986472	25960890	13343282	14738260	9643190	11222630	**41.95%**	**43.23%**
14	PUNJAB	104.09%	112.70%	171.06%	181.61%	57.23%	63.66%	30340329	33163299	20526339	22219336	9813990	10943963	**32.35%**	**33.00%**
15	RAJASTHAN	65.35%	70.54%	149.88%	159.77%	38.79%	42.44%	44387580	48472845	24339883	26293610	20047697	22179235	**45.17%**	**45.76%**
16	TAMIL NADU	97.73%	105.96%	150.60%	160.17%	48.55%	53.95%	58706095	63852256	43593451	47259185	15112644	16593071	**25.74%**	**25.99%**
17	UTTAR PRADESH - (East)	52.97%	58.97%	145.15%	158.27%	26.57%	30.38%	65146971	73138666	37044756	40714207	28102215	32424459	**43.14%**	**44.33%**
18	UTTAR PRADESH - (West)[4]					0.00%	0.00%	46622166	52896760	31131217	34900037	15490949	17996723	**33.23%**	**34.02%**
19	WEST BENGAL[5]	53.43%	59.60%	153.27%	173.31%	36.88%	40.71%	40418890	45388209	16489331	18808791	23929559	26579418	**59.20%**	**58.56%**
20	KOLKATTA	163.76%	168.45%	Data not available on the urban population in the Metros.		Data not available on the rural population in the Metros.		24614543	25529952	23697521	24550604	917022	979348	**3.73%**	**3.84%**
21	CHENNAI	163.41%	170.18%					14384336	15268853	14271002	15162303	113334	106550	**0.79%**	**0.70%**
22	DELHI	225.26%	235.63%					41663422	44519918	40567379	42927652	1096043	1592266	**2.63%**	**3.58%**
23	MUMBAI	180.45%	188.95%					37791762	40235517	37791762	40235517	0	0	**0.00%**	**0.00%**
ALL- INDIA		**70.89%**	**76.86%**	**156.94%**	**167.46%**	**33.83%**	**37.52%**	**846328166**	**926547689**	**564039562**	**611157850**	**282288604**	**315389839**	**33.35%**	**34.04%**

Note:Teledensity is calculated for UP(E) & UP(W) jointly due to non availabilty of separate population data for UP(E&W). 1.Includes Jharkhand, 2.Includes Chhattisgarh, 3.Includes North East I&II, 4.Includes Uttrakhand and 5.Includes A&N Islands.

Source: Population Projections for India & States 2001-2026,O/o the Registrar General of India and subscribers' data from BSNL(PSU), MTNL(PSU), AUSPI (Private-Wireline,WLL & GSM) and COAI (Private-GSM).

TABLE - 3

NUMBER OF TELEPHONES AS ON 31ST MARCH'11 & 31ST DECEMBER'11

Sl.No.	License area-wise	Wireline Phones						Wireless (GSM+CDMA) Phones						TOTAL TELEPHONES	
		TOTAL		PSUs' Operators		Private Operators		TOTAL		PSUs		Private Operators			
		March'11	December'11	March'11	December'11	March'11	December'11	March'11	December'11	March'11	December'11	March'11	December'11	March'11	December'11
1	ANDHRA PRADESH	2368169	2351337	2001056	1966602	367113	384735	60676836	65645401	7308540	8835316	53368296	56810085	63045005	67996738
2	ASSAM	257683	231683	255584	229088	2099	2595	11670711	13926481	1484007	1598487	10186704	12327994	11928394	14158164
3	BIHAR[1]	1196225	609135	1183267	594446	12958	14689	53541241	61004978	5980257	6022054	47560984	54982924	54737466	61614113
4	GUJARAT	1947196	1870185	1714975	1637087	232221	233098	46957643	51006284	3977469	4083179	42980174	46923105	48904839	52876469
5	HARYANA	650110	600662	609130	554818	40980	45844	20389507	21523973	3057475	2928781	17332032	18595192	21039617	22124635
6	HIMACHAL PRADESH	337476	315533	331623	309242	5853	6291	7215932	7806198	1670414	1719922	5545518	6086276	7553408	8121731
7	JAMMU & KASHMIR	216333	207293	216149	206966	184	327	5754286	6011170	833382	991438	4920904	5019732	5970619	6218463
8	KARNATAKA	2742534	2707345	2040456	1989078	702078	718267	49449711	53801988	5705297	6560514	43744414	47241474	52192245	56509333
9	KERALA	3300789	3205878	3182212	3082352	118577	123526	31361008	34155318	5965314	6808388	25395694	27346930	34661797	37361196
10	MADHYA PRADESH[2]	1383627	1197905	1040334	853788	343293	344117	45825174	50154563	5018630	4777484	40806544	45377079	47208801	51352468
11	MAHARASHTRA	2853191	2667523	2482216	2273011	370975	394512	61716246	68600066	6596309	5903746	55119937	62696320	64569437	71267589
12	NORTH-EAST[3]	269395	253291	269235	253057	160	234	7184577	8266334	1439509	1553414	5745068	6712920	7453972	8519625
13	ORISSA	571103	467422	560504	456115	10599	11307	22415369	25493468	3831699	4234329	18583670	21259139	22986472	25960890
14	PUNJAB	1579054	1485166	1231817	1132502	347237	352664	28761275	31678133	4577025	4731202	24184250	26946931	30340329	33163299
15	RAJASTHAN	1287201	1197307	1182757	1079720	104444	117587	43100379	47275538	5691079	5697195	37409300	41578343	44387580	48472845
16	TAMIL NADU	1976096	1882588	1789059	1689924	187037	192664	56729999	61969668	6886289	7863987	49843710	54105681	58706095	63852256
17	UTTAR PRADESH - (East)	1467586	1387623	1369941	1284226	97645	103397	63679385	71751043	10069644	10239584	53609741	61511459	65146971	73138666
18	UTTAR PRADESH - (West)[4]	855158	816925	819478	779736	35680	37189	45767008	52079835	4401674	4673023	41365334	47406812	46622166	52896760
19	WEST BENGAL[5]	757373	694786	750854	686839	6519	7947	39661517	44693423	3320571	3524516	36340946	41168907	40418890	45388209
20	KOLKATTA	1401154	1176788	1199651	972575	201503	204213	23213389	24353164	2487240	2388975	20726149	21964189	24614543	25529952
21	CHENNAI	1481722	1472009	994607	972602	487115	499407	12902614	13796844	1532302	1626271	11370312	12170573	14384336	15268853
22	DELHI	2838818	2885115	1546432	1554281	1292386	1330834	38824604	41634803	2643248	2799882	36181356	38834921	41663422	44519918
23	MUMBAI	2991856	3001712	1917537	1899485	1074319	1102227	34799906	37233805	2835896	2897923	31964010	34335882	37791762	40235517
ALL- INDIA		34729849	32685211	28688874	26457540	6040975	6227671	811598317	893862478	97313270	102459610	714285047	791402868	846328166	926547689

Note: 1.Includes Jharkhand, 2.Includes Chhattisgarh, 3.Includes North East I&II, 4.Includes Uttrakhand and 5.Includes A&N Islands. Source: Subscribers' data from BSNL(PSU), MTNL(PSU), AUSPI (Private-Wireline,WLL & GSM) and COAI (Private-GSM).

TABLE - 4

NUMBER OF VILLAGES WITH DIRECT ACCESS TO TELECOM FACILITIES

Sl. No.	Circles/States	No. of Villages (Rev.w.e.f.OCT.07)	Villages covered with VPTs as on						PCOs (PSUs) as on (Local+STD+Highway)	
			Public		Private*		TOTAL VPTs			
			31.03.2011	31.12.2011	31.03.2011	31.12.2011	31.03.2011	31.12.2011	31.03.2011	31.12.2011
1	Andaman & Nicobar	501	343	350	0	0	343	350	517	416
2	Andhra Pradesh	26613	23961	24001	845	845	24806	24846	127961	107407
3	Assam	25124	24221	24326	0	0	24221	24326	27380	23271
4	Bihar	39032	38926	38932	0	0	38926	38932	64182	62389
5	Chhattisgarh	19744	18169	18170	0	0	18169	18170	5759	4243
6	Gujarat	18159	16932	16932	1130	1130	18062	18062	58392	49964
7	Haryana	6764	6678	6678	0	0	6678	6678	14634	11166
8	Himachal Pradesh	17495	17387	17406	0	0	17387	17406	8532	7206
9	Jammu & Kashmir	6417	6343	6353	0	0	6343	6353	10721	9832
10	Jharkhand	29354	28804	28807	0	0	28804	28807	17500	12276
11	Karnataka	27481	27448	27449	0	0	27448	27449	188121	166401
12	Kerala	1372	1372	1372	0	0	1372	1372	85734	65737
13	Madhya Pradesh	52117	51986	51986	0	0	51986	51986	49703	38498
14	Maharashtra	41442	39741	39743	878	878	40619	40621	174688	157523
15	North-East-I	7347	6271	6505	0	0	6271	6505	7857	7121
16	North-East-II	7456	5987	6001	0	0	5987	6001	8643	7589
17	Orissa	47529	44750	44858	0	0	44750	44858	16978	14714
18	Punjab	12301	12065	12065	0	0	12065	12065	16792	15621
19	Rajasthan	39753	38838	38838	572	572	39410	39410	40671	35525
20	Tamil Nadu	13837	13837	13837	0	0	13837	13837	155319	130281
21	Uttaranchal	15761	15364	15365	0	0	15364	15365	9285	8599
22	Uttar Pradesh(E)	76993	74121	74121	0	0	74121	74121	111361	106642
23	Uttar Pradesh(W)	20949	23629	23629	0	0	23629	23629	23426	21955
24	West Bengal	37365	36268	36517	0	0	36268	36517	41868	35290
25	Kolkata	1040	567	567	0	0	567	567	53872	18066
26	Chennai	1655	1655	1655	0	0	1655	1655	75121	74455
27	Delhi	NA	0	0	0	0	0	0	65237	62938
28	Mumbai	NA	0	0	0	0	0	0	110320	99042
	All-India	593601	575663	576463	3425	3425	579088	579888	1570574	1354167

NA= Not Applicable * Data provided by USOF

TABLE - 5

NUMBER OF EMPLOYEES (DEPARTMENT OF TELECOMMUNICATIONS)- TOTAL, SCHEDULED CASTE/TRIBE, EX-SERVICEMEN (ABLED & DISABLED), WOMEN AND THEIR %AGE TO RESPECTIVE NUMBERS AS ON 31ST MARCH 2011

Group	No. of Employees	Scheduled Caste	% to Total Employees	Scheduled Tribe	% to Total Employees	Ex-service men (Abled)	% to Total Employees	Ex-service men (Disabled)	% to Total Employees	Women Employees	% to Total Employees
A	452	63	13.94%	31	6.86%	0	0.00%	0	0.00%	48	10.62%
B	763	84	11.01%	23	3.01%	0	0.00%	0	0.00%	138	18.09%
C	928	165	17.78%	45	4.85%	19	2.05%	0	0.00%	121	13.04%
D	115	46	40.00%	15	13.04%	3	2.61%	0	0.00%	3	2.61%
Total	**2258**	**358**	**15.85%**	**114**	**5.05%**	**22**	**0.97%**	**0**	**0.00%**	**310**	**13.73%**

TABLE - 6

NUMBER OF DISABLED EMPLOYEES (INCLUDING DOT) AS ON 31ST MARCH 2011

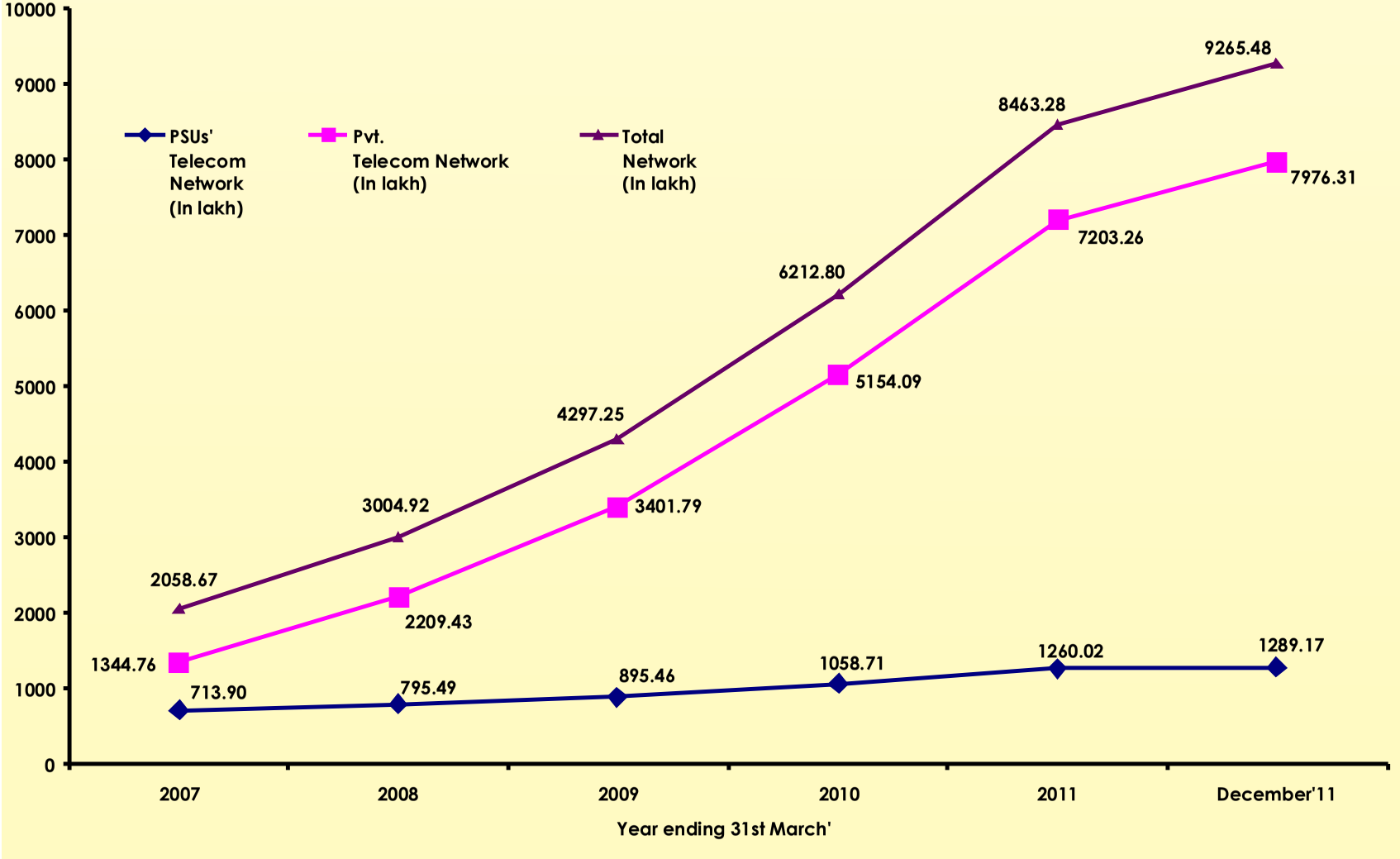
Class	Strength		Difference
	% of Sanctioned	Working	
Blindness of Low Vision	5	4	1
Hearing Impairment	4	0	4
Locomotors Disability or Cerebral Palsy	7	5	2
Total	**16**	**9**	**7**

❖ ❖ ❖

X. Graphs and Charts

FIGURE - 1

GROWTH OF TELECOM NETWORK [PSUs & PRIVATE]



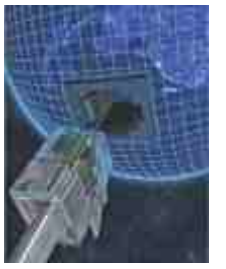


FIGURE - 2

TELE-DENSITY (NUMBER OF TELEPHONES PER 100 POPULATION)

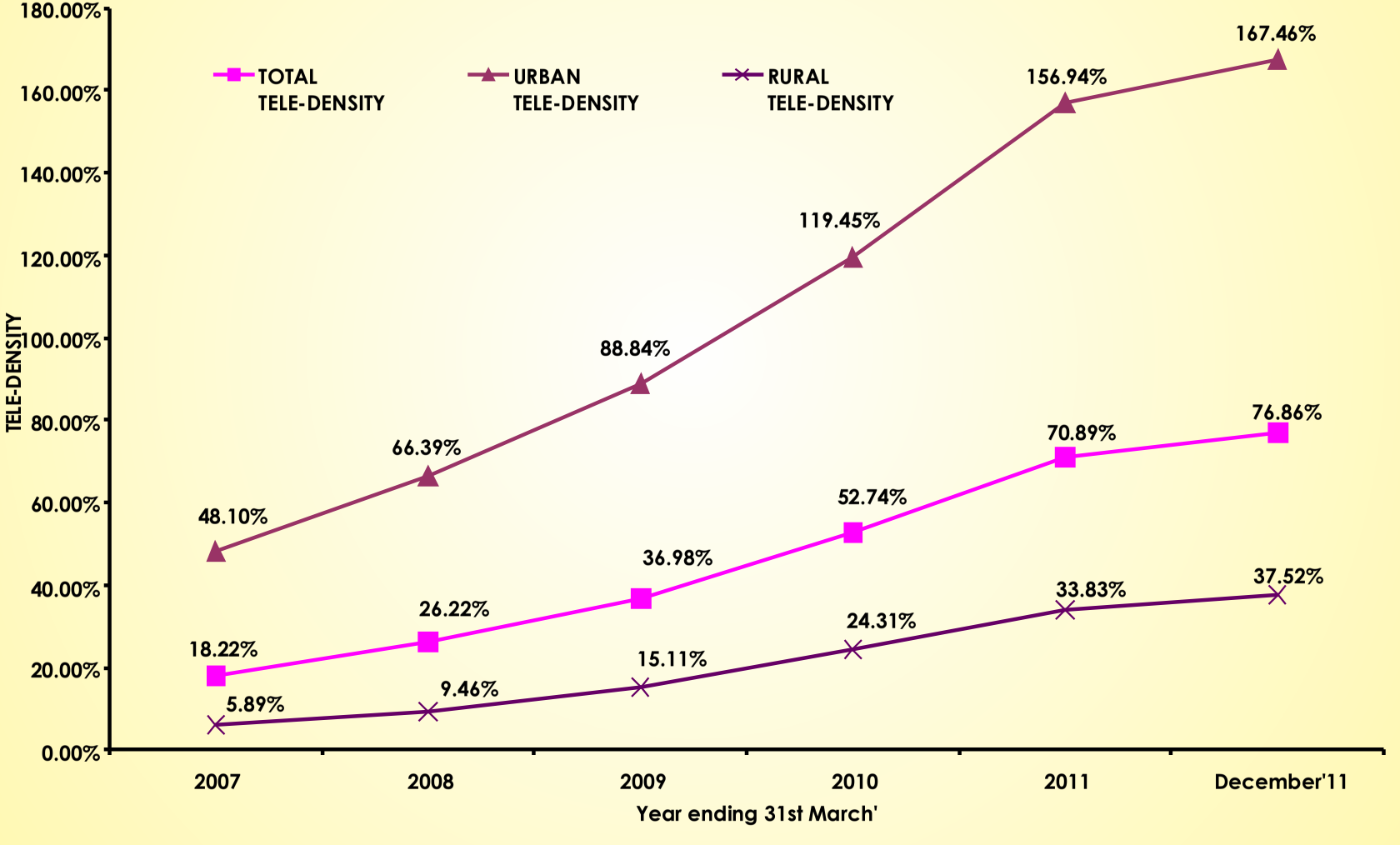
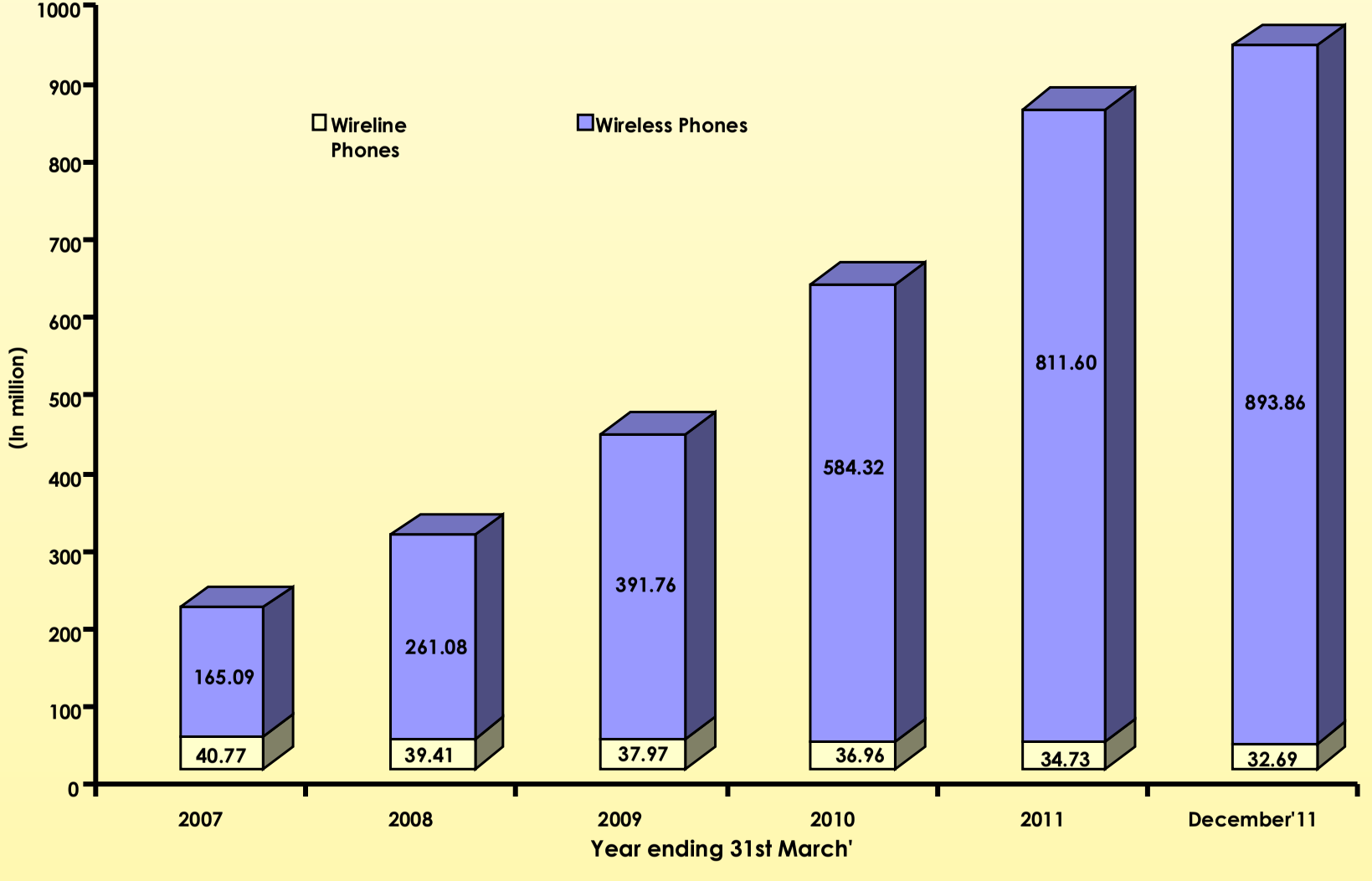


FIGURE - 3

WIRELINE TELEPHONES AND WIRELESS TELEPHONES



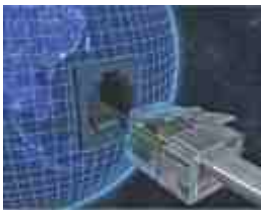
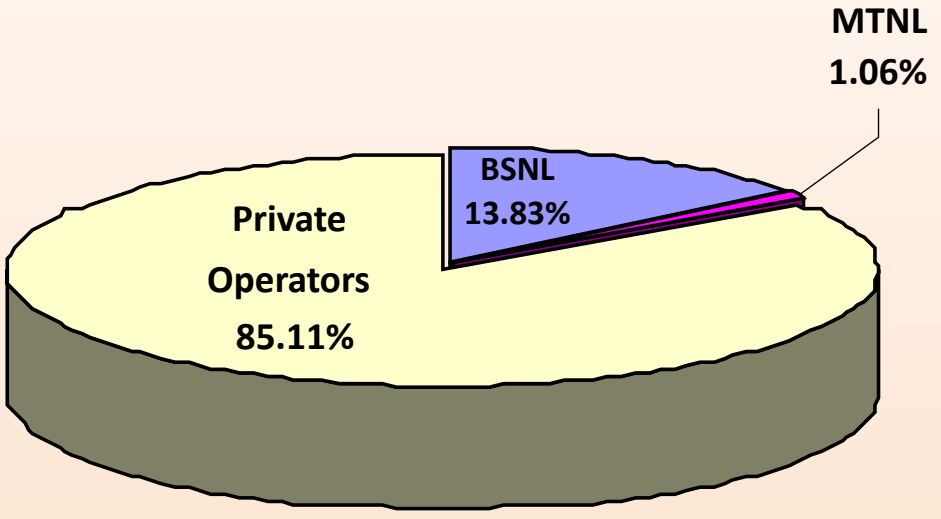


Figure - 4

DISTRIBUTION OF Total Phones [Wireline+Wireless][PSUs+Pvt.] As on March 31, 2011



As on 31st December, 2011

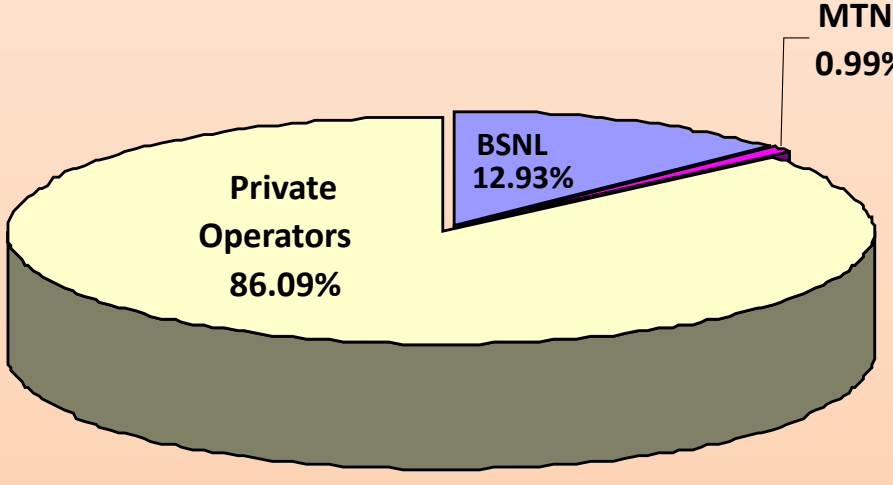
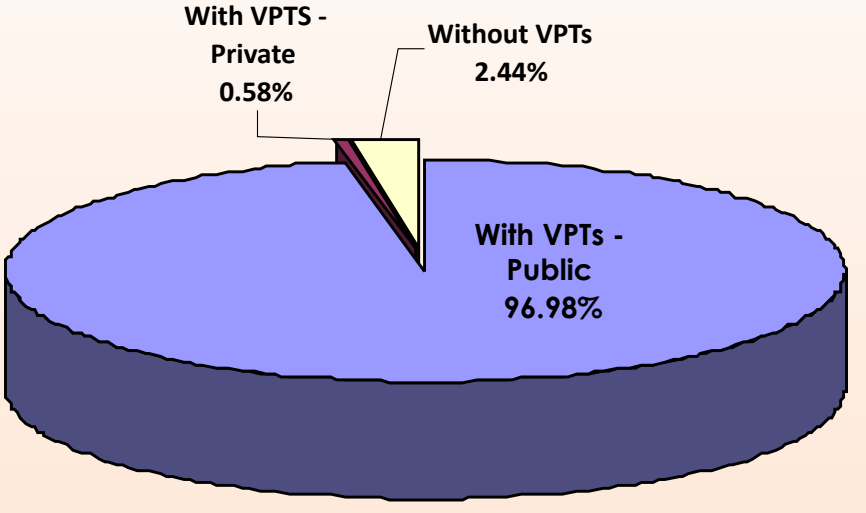
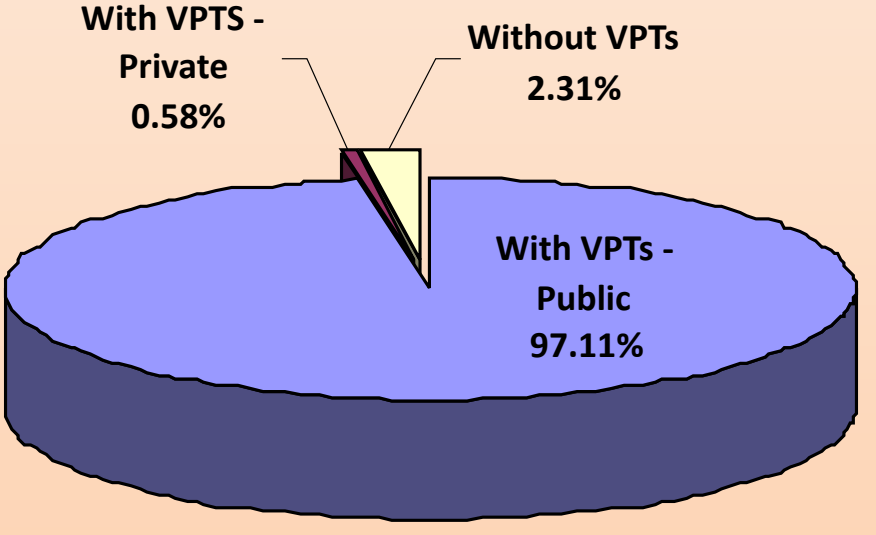


Figure - 5

COVERAGE OF VILLAGES BY VPTs
(AS ON MARCH 31, 2011)



AS ON DECEMBER 31, 2011



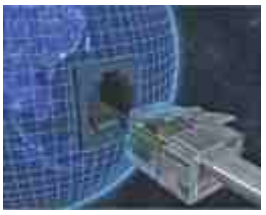
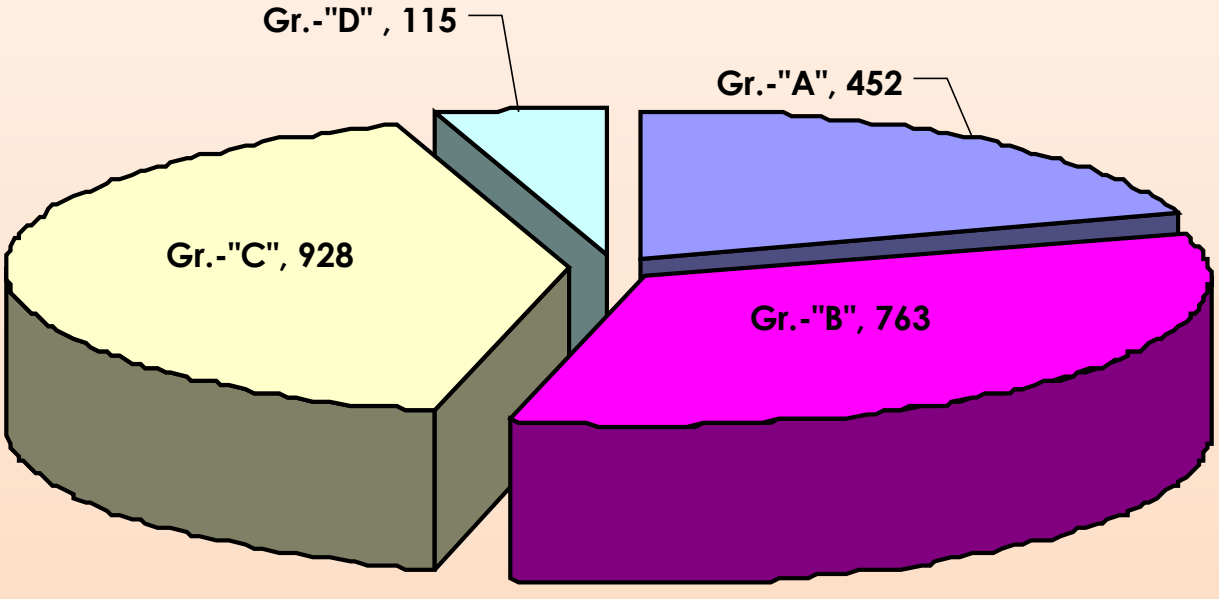


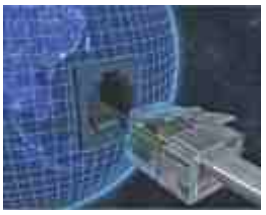
FIGURE - 6

DISTRIBUTION OF GROUP-WISE STAFF STRENGTH
(As on 31st March, 2011)



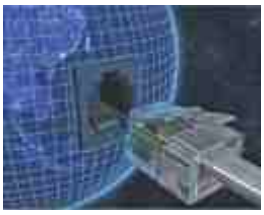
ACRONYMS

ACC	Accounts Calling Card
ADC	Access Deficit Charge
ADSL	Asymmetrical Digital Subscriber Line
ALTTC	Advanced Level Telecom Training Centre
APT	Asia Pacific Telecommunications
ATM	Asynchronous Transfer Mode
BRBRAITT	Bharat Ratna Bhim Rao Ambedkar Institute of Telecom Training
CACT	Component Approval Centre for Telecom
CAD	Computer Aided Design
C-DoT	Centre for Development of Telematics
CDMA	Code Division Multiple Access
CIDA	Canadian International Development Agency
CLIP	Callers Line Identification Protocol
CMPs	Cellular Mobile Phones
COMAC	Centralised Operation & Maintenance Centre
CSMS	Customer Service Management System
DCC	Development Coordination Committee
DCME	Digital Circuit Multiplication Equipment
DCSP	Data Centre Service Providers
DECT	Digital Enhanced Cordless Telephone
DIAS	Direct Internet Access System
DLC	Digital Loop Carrier
DWDM	Dense Wavelength Division Multiplexing
EMTS	Express Money Transfer Service
FAS	Fibre Access System
FDMA	Frequency Division Multiple Access
FRS	Fault Repair Service
GMPCS	Global Mobile Personal Communication by Satellite



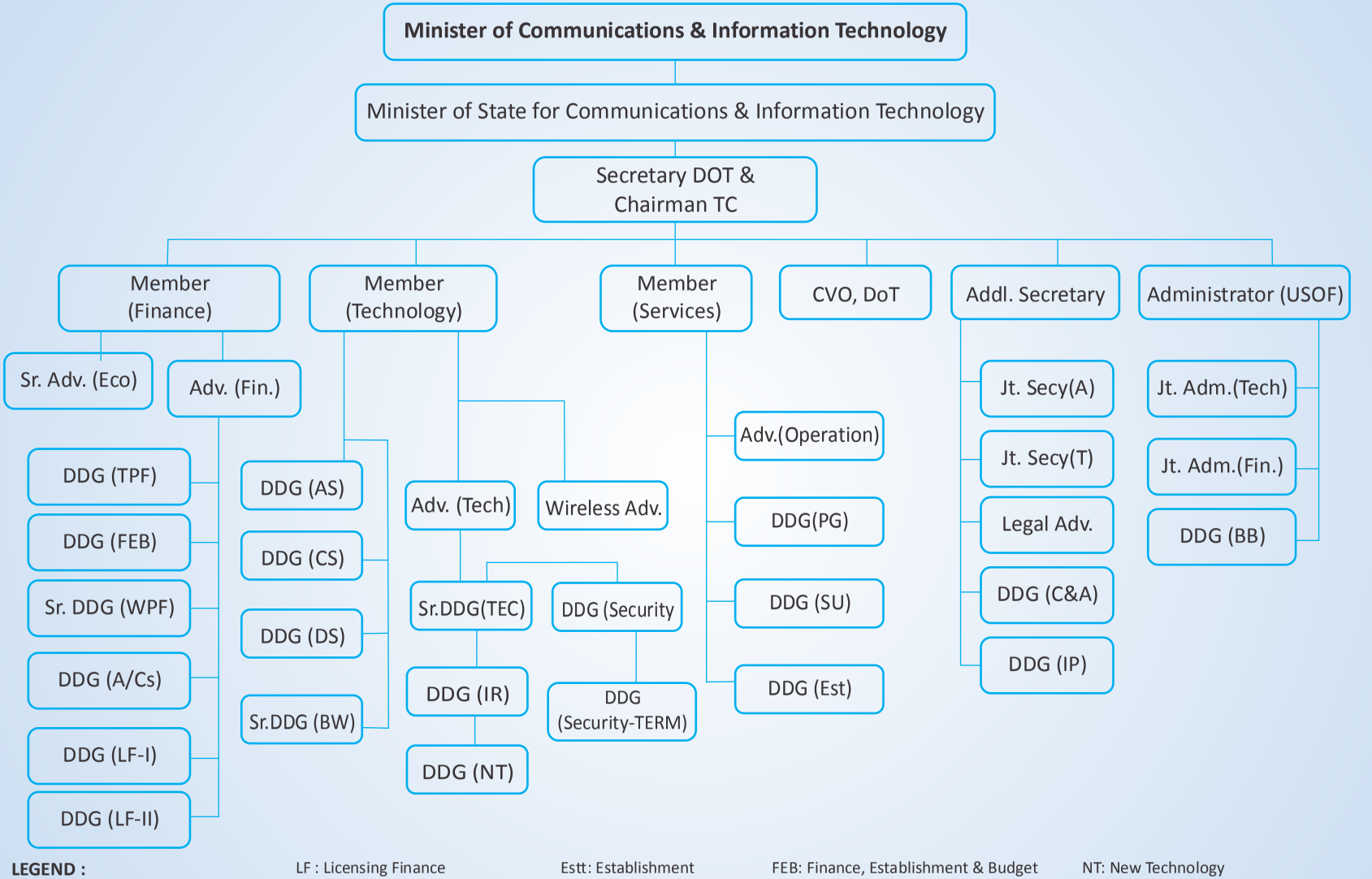
GPSS	Gateway Packet Switching System
GRs	Generic Requirements
HECS	High Erlang Capacity Switch
HSDL	High bit rate Digital Subscriber line
HSDPA	High Speed Downlink Access
IDC	Internet Data Centre
IPTV	Internet Protocol Television
IFRB	International Frequency Regulation Board
ILD	International Long Distance
IMRB	Indian Marketing Research Bureau
IN	Intelligent Network
INSAT	Indian National Satellite
IRs	Interface Requirements
ISDN	Intigrated Services Digital Network
ISP	Internet Service Provider
ITU	International Telecommunications Union
IUC	Interconnection Usage Charge
IVRS	Interactive Voice Response System
LMDS	Local Multi-Point Distribution System
LOI	Letter of Intent
LIS	Lawful Interception System
MCIBS	Microprocessor Controlled Intelligent Building Systems
MCPC	Multi Channel Per Carrier
MLLN	Managed Leased Line Network
MMS	Multimedia Messaging Service
MPLS	Multi Protocol Label Switching
MSS	Mobile Satellite System
MTL	Millennium Telecom Limited
MUX	Multiplexer
NATFM	National Academy of Telecom & Finance Management

NFAP	National Frequency Allocation Plan
NIB	National Internet Backbone
NLDS	National Long Distance Service
NMS	Network Management System
NOFN	National Optical Fiber Network
NTP	New Telecom Policy
NYSF	New York Stock Exchange
OFC	Optical Fiber Cable
OLTE	Optical Line Terminating Equipment
QTS	Quality of Telephone Service
QOS	Quality of Service
PCB	Printed Circuit Board
PCC	Pre-paid Calling Card
PRC	Premium Rate Calling
PMRTS	Public Mobile Radio Trunk Service
POI	Point of Interconnection
POT	Plain Old Telephone
PRS	Premium Rate Service
PSTN	Public Switching Telecom Network
RABMN	Remote Area Business Message Network
RAN	Radio Access Network
RTTC	Regional Telecom Training Centre
SAS	System of Accounting Separation
SBM	Signal Base Module
SDCA	Short Distance Charging Area
SDH	Synchronous Digital Hierarchy
SIM	Subscribers Identification Module
SSA	Secondary Switching Area
STM	Synchronous Transport Module
TCP	Transmission Connection Protocol



TDMA	Time Division Multiple Access
TDSAT	Telecom Dispute Settlement Appellate Tribunal
TRAI	Telecom Regulatory Authority of India
TSP	Tribal Sub Plan
TTL	Telecom Testing Laboratory
TTO	Telecommunications Tariff Order
UAN	Universal Access Number
UHF	Ultra High Frequency
UMS	Unified Messaging Service
UPN	Universal Personal Number
USF	Universal Service Fund
USO	Universal Service Obligation
UTL	United Telecom Limited
VCC	Virtual Calling Cord
VMS	Voice Mail Service
VOIP	Voice over Internet Telephony
VPN	Virtual Private Network
VPT	Village Public Telephone
VRLA	Value Regulated Lead Acid
VSAT	Very Small Aperture Terminal
WLL	Wireless in Local Loop
WPC	Wireless Planning & Coordination
WPHS	Web Page Hosting Service

(Current Organization Chart) Department of Telecommunications



LEGEND :

TPF : Tariff Public Enterprises Finance
AS : Access Services
WPF : Wireless Planning Finance
Eco : Economic
A: Administration
LF : Licensing Finance
TEC: Telecom Engineering Centre
CS: Carrier Services
DS: Data Services
Prod.: Production
BB: Broadband
Estt: Establishment
SR: Staff Relations
IR: International Relations
SU: Service Unit
JS: Joint Secretary
Adv.: Advisor
FEB: Finance, Establishment & Budget
PG: Public Grievances
LA: Legal Adviser
T: Telecom
Fin: Finance
C&A : Coord & Administration
NT: New Technology
VIG: Vigilance
BW: Building Works
DDG: Dy. Director General
USOF: Universal Service Obligation Fund

Department of Telecommunications
Ministry of Communications & Information Technology
Government of India
New Delhi

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